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MEMORY MANUAL

By GEORGE YULE.

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GEORGE YULE, 1511 Washington Ave.
ST. LOUIS, MO.

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MEMORY MANUAL.

EXPLAINING, IN SHORT AND SIMPLE LESSONS,

A SYSTEM OF

AIDING, STRENGTHENING AND DEVELOPING THE MEMORY; BY THE USE OF WHICH THE YOUNG, MIDDLE-AGED OR OLD MAY THE MORE EASILY REMEMBER ORDINARY THINGS; AND, MOREOVER, MAY BE ENABLED TO ACCOMPLISH THINGS IMPOSSIBLE OF ACCOMPLISHMENT BY ORDINARY METHODS.

APPLIED TO

WORDS; NUMBERS; STATISTICS; PROSE; POETRY; PUBLIC SPEAKING WITHOUT NOTES; VERBAL REPORTING; SCRIPTURE TEXTS; DECISIONS IN LAW; HISTORY; GEOGRAPHY; LANGUAGES; MUSIC; TECHNICAL, SCIENTIFIC, AND FOREIGN TERMS; PROPER NAMES; ETC., ETC.

WITH AN

APPENDIX FOR REFERENCE

COMPILED FROM THE RESULTS OBTAINED FROM A PHONETIC ANALYSIS OF THE ENGLISH LANGUAGE.

TO WHICH ARE ADDED CHRONOLOGICAL TABLES OF EVENTS IN HISTORY, ETC.

By GEORGE YULE,

Lecturer on "MEMORY."

THIRD EDITION.

PRINTED FOR THE AUTHOR.

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1886.

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PREFACE.

It may be said that Memory is the basis upon which all knowledge rests. Without Memory, education, and, indeed, the whole fabric of human economy, would relapse into chaos. But, although this wonderful faculty is so pre-eminently important, it is very seldom studied and, consequently, but little understood. The young at school or college, as well as persons of riper years, are left to make use of their own crude devices, following blindly their untutored instincts as to the manner in which, or the methods by which, they should impress upon the memory the more difficult matter they wish to remember.

Every mind, it seems, whether learned or ignorant, whether young or old, without any outside suggestion or teaching whatever, but of its own spontaneous instinct, resorts to various devices or expedients for the purpose of impressing upon, and distinguishing in, the memory, by the agency of association, things that otherwise cannot be readily remembered, or effectually distinguished from each other. This principle of resort to the agency or assistance of association is a natural and righteous principle of the healthy human

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mind; and, being so, and, moreover, being of constant use and application, it seems proper that the better and more effective devices or expedients for aiding the memory by association should be singled out, arranged, and, as far as possible, reduced to an intelligible and practical system; so that, instead of having to grope blindly in the dark—as is the usual course—persons may be enabled to proceed to the application of the laws of association with the light and advisement of experience.

Some have deprecated the use of any and all methods or systems of memory, characterizing them as "artificial." Doubtless there has been very considerable excuse for the adoption of such an attitude; for many enthusiasts have produced "systems" of memory which have been overloaded by a redundance of elaborate and distressing detail; and marked by an injudicious ramification of far-fetched device. The present writer is as much opposed as anyone to the substitution of an elaborate artificialness for the free and natural operation of the individual memory; but, at the same time, as order is preferable to disorder, system to confusion, culture to chaos, and skill to clumsiness, he recognizes a true and legitimate sphere for the application and exercise of a simple and judicious system of memory.

A good system will aim at systematizing, simplifying, and directing to the best advantage, such devices

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and expedients as everyone resorts to instinctively as aids to the memory; but which the most of persons use in the crudest and clumsiest fashion. A good system of memory, moreover, will not attempt to supersede the natural operations of individual memory, but will leave a wide sphere for the play of the natural function, to the end that the natural function be strengthened and developed. In short, a good system of memory will neither be overloaded with burdensome detail nor run into injudiciously elaborate ramifications, but will ever keep in view its legitimate function as *an auxiliary to the natural memory*. While, then, the over-employment of artificial expedients is to be deprecated, as tending towards the retardment of the development of the free, natural memory, a judicious system of aids to the memory is to be welcomed by intelligent persons; and is no more entitled to be disparaged as "artificial" than is the art of writing, or the art of speaking, or the art of singing—all in the same sense as the art of memory "artificial" things. The proposition may be laid down that, when art tends to mere artificialness, it is censurable and to be avoided; but that when it tends to the development of nature, or the better use of righteous natural functions and principles, it is to be appreciated and sought after. As a simple matter of fact the keenest intellects, both ancient and modern, have appreciated the philosophy and the value of sys-

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tematized aids to the memory. The art of memory was assiduously cultivated by the ancient Greek philosphers, as the writings of Plato and Aristotle bear witness. The Romans, also, highly valued the art, as see the accounts of Cicero, Pliny and Quintilian. In comparatively modern times Roger Bacon wrote upon the subject. The ancient systems, however, although based upon the same underlying principles as the system sought to be conveyed in the present work, were very different from it, and were exceedingly "artificial," elaborate and cumbersome. The introduction of the art of printing, by means of which the moderns have been afforded facilities for ready reference which the ancients did not enjoy, accounts, in a large measure, for the comparatively little attention that has been paid to the systematic cultivation of the memory in more recent times.

A Method or System of Memory by Association is given in the following pages. This easily acquired system is designed to afford the student, and the public generally—adults as well as younger persons—the use of a very simple Art, by means of which much laborious drudgery may be transformed into really cheerful occupation ; by means of which, moreover, the memory may be rendered infinitely more trustworthy, in many respects, and the easy accomplishment be made possible of things which would be utter impossibilities to the unaided memory. A person

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with a naturally poor memory may be enabled, by the use of this Method, to accomplish things that one with an unusually good memory, who does not use the Method, would not attempt. The author of the present work, for instance, before himself using the Method, was so exceedingly deficient in the power of remembering numbers and dates as to be unable to remember correctly, from year to year, *his own birthday*; but by the use of the System he is now able to remember *easily* many hundreds of complicated numbers, together with hundreds of exact historical dates—year, month and day. He now feels assured of a capability of remembering, with unerring precision, *thousands* of numbers and dates.

The author names the following as samples of the results obtainable from the System, viz: the committing to memory, in a wonderfully short space of time, and in a manner involving no mental strain, but easily and pleasurably, the dates of one thousand historical events—year, month and day; one thousand latitudes and longitudes of cities, seaports, etc., in all parts of the world; the books of the Bible, in their order, with the number of chapters in each; the decimal tables of combining proportions in chemistry; long lists of historic dynasties, with dates and durations of reigns; the lengths of hundreds of rivers; the heights of hundreds of mountains; long and difficult pieces of prose and poetry, etc., etc. The

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System, moreover, facilitates the acquirement of foreign languages, and the study of anatomy, astronomy, botany, and many other subjects.

A beginner, even, of average intelligence, may commit to memory a series of fifty or one hundred disconnected words, in their order, by hearing them read over only *once;* and will be able to repeat them, not only forward but backward! When a little further advanced, he will be able to do the same with a long column of numbers.

The possessor of this System, if a speaker, may remember the heads of his subject, in their order, and so be assisted to speak without notes; a business man may remember lists of prices, series of matters requiring attention, or heads of subjects to be referred to in an interview or letter, etc.; a book-keeper may remember ledger numbers; and so forth. The results enumerated, however, are only a few of the things rendered possible to the possessor of this System, for it is capable of application to almost every branch of study, and may be largely utilized where memory is necessary in the affairs of every-day life. This System, of course, as already intimated, is intended as an auxiliary to, not as a substitute for, the natural memory.

In early life the author had heard of wonderful feats of memory that had been performed at a public hall in his native city by a certain travelling Doctor

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and a troop of boys that accompanied him; but, although much interested in the matter, and anxious to improve his own memory, it was not till many years afterwards that he was able to get some idea as to how the feats in question had been accomplished:—he met with a person professing to teach the wonderful Art, and gladly enrolled himself as a pupil. From his teacher the author received the Key of Consonants and also a list of one hundred words called a "Nomenclature Table," and which, as revised and altered, is reprinted in this work under the title of Table of Fixed Ideas.

But the Method as furnished by the said teacher to his pupils was crude and incomplete. Among other things, it was necessary that, in order that the principles of the Method might be conveniently applied to the remembering of numbers and dates, the possessor of the art should have at his disposal, for reference, a compilation of words based upon the Key of Consonants already referred to. Not being aware at that time that there was any literature upon the subject, and not knowing of any way in which he could supply the want of a compilation of words based upon the Key of Consonants, except by his own personal research, the author undertook and carried out a careful phonetic analysis of the English language, from the results of which he compiled the Appendix annexed to this work. After the manuscript of the first edition

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was prepared for the printer, however, a few words—perhaps thirty or forty—were added to the Appendix. These words the author culled from the work of another writer, the existence of which was brought to his notice two or three years after he had finished his own labors on the subject. In the present edition the Appendix has been still further enlarged.

Since the present author first acquired the crude principles of the Method which he has systematized in the present work, he has, mainly by his own thought and experiment, but, to some extent, by reference to such technical works of others as were available, made himself acquainted with the range of the capabilities of association in affording aids to the memory. He has also made himself acquainted with the history and development of the systematism of association. In this little work, however, his object is simply to present the principles of his System in the shape of easy lessons, so that the learner (without being made acquainted with the general history and development of the Art) may obtain the benefits to be derived from the same with as little outlay of time and labor as possible. The author has not attempted to enter into any metaphysical disquisition upon the elements of the human mind, or the constitution of the faculty of memory. Upon the contrary he has avoided such things and endeavoured to afford practical aids to the memory by means as simple and speedy as

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possible. It is believed that by means of the Mnemonic Triangle or Pictorial Pyramid, designed by this author, and found embodied in this work—as well as for other reasons—persons may acquire the present System of Memory more easily, speedily and effectually than any other.

So wonderful, nay, so apparently *miraculous*, are the results that may be easily obtained, in the way of memorizing, by the application of association, that many persons have seized upon the Art, and, making a profession of lecturing upon and teaching some system of association, have, by their manner of handling the subject, brought it into some disrepute in the eyes of many. So easily may the Art be acquired, that anyone, almost, in a very short time, may blossom out into a professor of memory, able to accomplish wonderful feats before the public. As a simple matter of fact, however, these professors of memory have usually been men whose ability to remember by association has greatly excelled their disposition to handle the matter candidly, honestly and truthfully. Although a good thing in itself, and a matter with which every one should be acquainted, these professors of memory have not been satisfied with telling the truth concerning the Method, but have been wont to involve it in the deepest mystery, in order that they might indulge in the most absurd exaggerations as to its powers, capabilities and benefits. For instance, they have

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been wont to get an audience to test their power of memorizing, by one hearing, say fifty or a hundred random words, called out, or written down upon the blackboard, by anyone in the audience who chose to do so: and, when, to the amazement of the audience, they have succeeded in the task, and correctly repeated the long and confused list of words, both forwards and backwards, they have permitted the audience to infer that, by the method used by them, all classes of matter could be memorized just as easily, speedily and effectually. The professor from whom the present writer acquired the first crude principles of the Method sat, upon one occasion, with the pastor of a church in the pulpit, while the pastor, among the other intimations, stated—no doubt ignorantly—that by the Method taught by the Professor the entire contents of a book could be correctly memorized by a a single reading!

It is the desire and object of the present writer, both in his lectures and in the present work, to divest the Art of Memory by Association of the mystery, clap-trap and wanton exaggeration in which it has been involved by unscrupulous persons, and to present the subject as frankly, plainly and simply as possible; to the end that such benefits as the Method most undoubtedly confers may be readily obtained by those desiring them. Let the reader understand, at the outset, that, while some wonderful feats of mem-

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orizing may be accomplished by a single reading, everything cannot be so easily memorized.

As already stated, the Method or System explained in the present work is based upon Association of Ideas, which is a principle natural to the human mind, as is evidenced by the instinctive, though crude, use of the principle by many. The Memory Manual contains the complete system, and is so arranged as to enable anyone to easily acquire the Art, even without the aid of a Teacher.

Let no one suppose that the use of the System must entail increased labor, seeing that not only must the matter to be memorized be remembered, but the System also. Such a suggestion recalls to the mind of the author a little story. A farmer found a neighbor at work one day at an enormous pile of wood, sawing away, for dear life, with an intolerably dull saw. "Why don't you sharpen your saw, Jim?" asked the farmer. Dashing the sweat from his brow, and looking up, James replied; somewhat sharply, "I should think I had work enough to saw up this wood, without stopping to sharpen saws!"

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IMPROVED METHODS OF MEMORY.

Lesson I.—How to commit to memory a long and random series of disconnected words, by reading them over, or hearing them read, only once; so as, from recollection, to be able to repeat the series correctly, in its order, not merely forward, but backward; and not only immediately after memorization, but also after a considerable lapse of time.

EXAMPLE.—Take the following random series:—

lion	river	church
boy	eagle	boat
newspaper	trunk	snake
tree	fish	telescope
gun	palace	castle
soldier	monkey	diamonds
wagon	net	chimney
clown	cave	coat
horse	gunpowder	cemetery
bridge	kite	cheese
picture	broom	iceberg
stove	balloon	Indian
pen	clock	teacups
library	barrel	grapes
banner	lamp	brick.

Learner: You will observe that the above are all simple words (how to remember other words, such

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as proper names, is explained in subsequent lessons) and are the names of Objects which may be readily *visualized*, or pictured in the mind's eye. In order to effectively commit the above, or any similar series of words to memory, you are not required to employ the ordinary and tedious method of frequent repetition, or learning by rote. We will explain how such a series may be effectively impressed upon the memory, at one reading, by very different means, and without the slightest strain upon the mind. Nor does it matter whether your natural memory be good, tolerable, or absolutely bad; for we will only call upon you to bring into play your *Imagination*—a faculty which, generally, is well developed, even in persons with "poor" memories.

Now, although we have called this first lesson a lesson in the memorizing of a series of words, and although, practically, it is a lesson in memorizing a series of words, nevertheless it is, strictly speaking, a lesson in the impression upon the mind of a series of mental images, or a chain of ideas. And here let it be observed that the words of a language are mere artificial signs, or combinations of signs, (letters), designed to enable persons to give expression to their ideas; or present or recall to the minds of others certain ideas which, by common consent, have been associated with the various words, and called their "meanings." The written or printed word *lion*, for instance, is merely a composite mark, sign, device or contrivance—made up of certain elementary marks or signs called "letters"—and is designed to express the idea of a particular animal, actually seen or only thought of—an animal which men using the English

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language have agreed to call by the name of "lion." So, in a foreign language, a word, composed of one or more of the letters or signs used in that language, will enable foreigners, with whom that language is the mother tongue, to represent or recall to the minds of each other the thought or mental image of the animal in question; that is, the foreign word will enable them to express the same idea which those using the English language express by the English word "lion."

Words, then, being merely artificial representatives of objects or ideas, you will not, in this lesson, try to impress upon the memory the mere words given in the series above; but will concern yourself exclusively with the objects or ideas themselves, the objects or ideas which the various words of the series represent. When, for instance, the first word of the series —lion—is given, you will not think of the mere word, or mark, *lion*, made up of the letters l-i-o-n, and try to picture the word in your mind's eye: upon the contrary, you will call up before the mind's eye the object or idea represented by the word—the actual lion. If, in this lesson, *ideas* be impressed upon the mind and not mere *words*, the series of English words given above may be accurately repeated from memory: or otherwise, the same series of objects or ideas may be expressed, in order, in any other language with which the learner may happen to be acquainted. The principle of the present lesson, therefore, practically applies to the memorization of words in any language.

Learner: If now you are ready to concentrate your attention for a few moments upon the following lesson, you may now proceed, with the expectation of being

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able to fix the above series of words in your memory within a few minutes.

To impress the series vividly upon the mind, by means of the Imagination, use the process of Mental Picturing, thus: Begin with the first two ideas—lion, boy. Picture in the mind's eye, by the aid of the imagination, a lion and a boy, perhaps meeting suddenly in the forest; observe the boy's attitude of terror; the lion's air of delighted expectancy, etc., etc. Let your mind dwell upon the picture till you are sure you have it thoroughly impressed, then let the picture pass away. Be careful not to burden your mind by trying to *remember* anything. Laying entirely aside all efforts to *remember* the series of words, simply follow our directions. Do not attempt to mix our plan and yours together. Now let the first word —lion—drop from your mind entirely, and proceed, as before, to form a new and distinct mental picture with the two ideas—boy, newspaper. A boy (the same boy who met the lion, or a different boy altogether) may be pictured, for instance, as reading a newspaper, or tearing a newspaper, or swallowing a newspaper; or any other picture suggested by the imagination may be made. (Sometimes the more ridiculous the picture the more strongly will it impress the mind.) Let your mind dwell upon this picture till it is properly impressed, and then let this picture also pass away. Now take up the next two ideas—newspaper, tree—and associate them in a mental picture in the same manner. Proceed, in the same way, through the entire list of words, dropping but one word at a time, and observing to present in a picture before the mind only *two* ideas at a time, namely, the first and second; then the second and third; then the third and fourth; then the fourth and fifth, and so on.

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In this manner, even if there be one hundred words to memorize, the process will continue simple to the end; for there never will be more than *two* ideas before the mind at once.

Observe *not* to run the series of words into a sort of connected story: do not, for instance, say: A *lion* met a *boy* in the forest, while the boy was engaged in reading a *newspaper*, which he had found under a *tree*, as he was about to load his *gun*, etc. Avoid running the series of words into story form in this manner; and take them up abstractly, as has been explained. Again, when two words—such as "gun" and "soldier"—come together very naturally and appropriately, be careful, when the picture is conjured up before the mind, to hold it long enough before the mind to make a good impression. Beginners, meeting with such appropriate combinations, and thinking that, as the ideas associate together so naturally, they will be sure to remember them, are apt to skip over them without impressing the picture properly: the consequence being that when they come to repeat the series from memory they cannot recall the very ideas they felt so certain they would be able to recall. In each and every instance pause long enough to make a good impression. Again, it may be observed that when a comparatively small object occurs in a series—as the word "pen" in the present series—a better impression of the idea may often be obtained by enlarging the object, and making it colossal, phenominal, striking.

In repeating, from memory, the series of words given in this lesson, do not say "lion meeting boy in the forest; boy reading newspaper," etc., but, although

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recalling the pictures to mind, one by one, *utter only* the words contained in the list, thus: Lion—boy—newspaper—tree—gun.

Now, if you go *once* through the list of words given above, or through any similar list, carefully making mental pictures as you go along, in the manner which has been explained, you will find that you can repeat the whole list from memory with ease; for, by the action of the principle of association of ideas, the first word will recall the second, the second the third, the third the fourth, the fourth the fifth, and so on.

After having correctly repeated the words from memory, from beginning to end, try (without any further study of the list) to repeat them in reverse order. You will find that you can repeat the series with just as much facility *backwards!*

You will find, moreover, that, not only are you able to correctly repeat the series forwards and backwards, immediately after having committed it to memory, but that, without giving any attention whatever to the matter in the interval, you will be able to repeat the series correctly the next day, or, perhaps, two or three days afterwards. The series may be retained in the memory for an indefinite period of time by turning it over in the mind occasionally, at ever lengthening intervals, and so gradually deepening and strengthening the original impression.

Words which do not readily suggest to the mind distinct objects or pictures—words, for instance, expressing abstractions, like happiness, faith, scenes, recollection, infancy—may be associated with other words by using symbolic pictures. For example: a mental picture of a bright family group may be used to symbolize

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"happiness;" a mental picture of a statue, with calm, trusting countenance turned heavenward, may be used to represent "faith;" a mental picture of the scenes of a diorama may be employed to represent "scenes;" a mental image of a human face, with a strikingly thoughtful, reflective expression, may be used to suggest "recollection;" or a mental picture of an infant in the cradle may be employed to represent "infancy."

We have now shown how, by one reading, a simple chain of ideas, or train of thought, may be effectively impressed upon the mind by association. Persons, however, may have such a chain of ideas, or train of thought, effectively impressed upon the memory and yet not be able to recall it to mind, at will; for the reason that they cannot remember just how it commenced, perhaps. Very often persons have a matter stored away in the memory, but when the occasion arises for the matter in question to be made use of, although perfectly certain that they *know* it, they have not the power to recall it to mind, or recollect it. A single word, perhaps, or the merest hint, would serve to prompt them, or "jog the memory," and enable them to bring forward the matter at once from the recesses of the mind. For want of that word, however, or for want of that hint, they are unable to avail themselves, at the required time, of an item of knowledge which they are quite certain is stored away, in good order, *somewhere* in their mental storehouse. It is in vain that they try to bring the matter up. Groping blindly about for such an item of knowledge is like grappling at random for a chain that has been lost in dark and deep waters. How, then, may a chain of ideas, or

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train of thought, be stored away in the mind in such a way as to be readily produced when called for?

A ship's chain may be allowed to drop overboard into the harbor, but if one end has been previously fastened to a post or anchor on the wharf the whole chain may be readily recovered, link by link. In like manner, when associating a chain of ideas, it is well to have a "post," anchorage, or Fixed Idea (which should be as well known to you, as readily remembered, and as instantly available as your own name) to which to fasten the end of the chain, so that the whole may not be lost overboard in the abyss of forgetfulness; or mislaid, rather, amidst the intangible mental mass of collective knowledge, thoughts, images and impressions. The word "post" itself, or rather the mental image suggested by the word, may be used as a Fixed Idea, to which to attach your chain of images or ideas. Or the idea "pillar" will do as well; or the idea "anchor." Or perhaps the learner's own name is such as to be suitable to be used as a Fixed Idea: for some proper names,—such as Hill, or Dale, or House, or Baker—suggesting, as they do, distinct mental images or pictures, are quite effective as Fixed Ideas. Having selected a Fixed Idea, and resolved that that idea shall be made as stationary in your mind, and as readily available, at any time, as your own name; you may proceed to associate the first idea of a series with that Fixed Idea, thus: Post—lion; or Pillar—lion; or Anchor—lion; or Hill—lion. To recall to memory the chain of ideas which has been attached to your Fixed Idea, recall the Fixed Idea; and it will serve to switch the mind at once on to the

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train of thought or chain of ideas which you desire to recall.

A memorandum of errands or engagements may be impressed upon the mind by the means explained in this lesson. But, in memorizing the heads of subjects to be referred to in an interview or letter, the name of the person to be interviewed, or written to, should form the post, anchorage, or Fixed Idea, to which to attach the end of the chain of matters to be referred to.

To persons given to much thinking, stray thoughts and ideas sometimes come when they are not in a convenient position to take a note of them,—in bed, for instance, when the light is out and no writing materials at hand. Such thoughts may be readily fastened to a fixed or stationary idea and recalled to mind on the morrow.

Sometimes, however, persons will gravely make a memorandum of certain matters to be attended to; and then forget all about both the matters and the memorandum. In the same way, the same persons may impress upon the memory, by the present Method, a series of matters to be attended to the next day; and yet, by reason of absent-mindedness, thoughtlessness or carelessness, utterly fail to remember, on the morrow, that there was anything special to be attended to: that is, they may, on the morrow, entirely fail to remember that there was anything to be remembered. With most persons, however, when a particular matter arises, and they

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have a desire or intention to attend to that matter, after a time; although they may soon forget just what the matter in question was, they will have a strong, instinctive feeling that there was *something* to attend o, at all events. They may ponder deeply for an hour or two, trying to recall to mind what the forgotten something was: when, failing to recall it, or get the slightest inkling as to what it was, they may proceed to worry over it for the remainder of the day; or until such time as it suddenly, and apparently accidentally, flashes upon the mind. Now, if a person impresses a matter, or series of matters, upon the mind, and attaches it to a fixed or stationary idea: whenever the instinctive feeling arises in his mind that there was *something* requiring attention, he will —by proceeding to the post, anchorage, or fixed idea to which he is in the habit of attaching or associating such matters—be enabled, instantly, to call the desired matter up, or start the particular train of thought to which he wishes to direct his mind. If, however, a person, having impressed certain matters upon his memory, and having duly attached them to a stationary idea, fails to experience, afterwards, that instinctive feeling already spoken of,—the strong instinctive feeling that there was *something* to remember—; if, in other words, he has a tendency to soon become entirely oblivious to the fact that there was anything whatever to be thought of, or attended to, the only satisfactory remedy for such a failing will lie in the line of giving due diligence to becoming more thoughtful, circumspect, and methodical in his personal habits. He should, for instance, seek to form the habit of asking himself, deliberately,

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at certain stated periods of the day, some such direct personal question as the following:

"Hello, John Jones! What have you to attend to to-day? Anything special?"

It is a common expedient for persons to seek to accomplish the end we have been speaking of by placing a memorandum in the face of their watch; or tying a string around the finger; or changing a ring from the customary finger to another, or from one hand to the other. Or again, the deliberate displacement of a piece of furniture, or of some other article, and the putting of it in some conspicuous and incongruous place, will have the same effect of afterwards arousing the attention of the person inclined to be oblivious. The common adoption of such expedients, it may be remarked, arises from an intuitive appreciation of the action of the principle of association of ideas.

In business there are matters which it is not advisable to trust entirely to the memory. Many, however, having a desire to be business-like, carry the principle too far, and seek to supersede the natural memory, to a great degree, by taking notes of everything, however trifling, and relying entirely upon these notes. Now, in reality, this indiscriminate use of notes or memoranda is not business-like; for it tends directly, and surely, to the impairment or destruction of the gift of memory. The power of memory is developed by use, or decreased by disuse: and many persons in business have ultimately come to realize that they have systematically ruined their faculty of recollection by taking notes of everything, and

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never trusting anything to the memory. Notes and memoranda should be used *judiciously*; and should not be allowed to practically supersede the use of the memory. The memory should be afforded facilities for constant exercise. If notes or memoranda be largely employed, the person using them should, as far as practicable, impress the matters upon the memory also; and, afterwards, refer to his notes only to substantiate what he has already called to mind by the exercise of the memory.

Furnished with a series of Fixed Ideas to represent the various days of the week, or of the month, the business man may acquire the habit, and the power, of systematically laying down in the mind, in advance, lists of matters to be attended to on each day. To recall to mind the chain of matters to be attended to on a particular day, recall the Fixed Idea representing that day. To represent the days of the week, words commencing with the initial letters of the respective days may be used as Fixed Ideas, thus: Monday—money; Tuesday—tube; Wednesday—wedge; Thursday—thistle; Friday—friar.

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Lesson II—The facilitation of the remembrance of pieces of composition, both prose and verse.

Make an outline or skeleton of the piece, by forming the leading ideas of each line or sentence into a series of words, and memorizing the series as explained in Lesson I.

Take the following, by way of illustration:

THE OLD OAKEN BUCKET.

How dear to my *heart* are the *scenes* of my childhood,
When fond *recollection* presents them to view!
The *orchard*, the *meadow*, the deep-tangled *wildwood*,
And every loved spot which my *infancy* knew!
The wide-spreading *pond*, and the *mill* that stood by it,
The *bridge*, and the *rock*, where the *cataract* fell,
The *cot* of my father, the *dairy-house* nigh it,
And e'en the rude *bucket* that hung in the *well*.

The leading ideas in the foregoing piece have been printed in italics, and should be memorized by the means explained in the first Lesson. In the case of a piece of composition, the *title* should be used as the anchorage, to which to attach the outline of the piece; so that the name of the piece shall serve to start in the mind the train of ideas involved in the composition. When the bare outline of the piece has been committed to memory, the learner may go over the series of ideas and fill in the details somewhat, qualifying the various ideas where they happen to be qualified. Let the learner go over the composition in something like the following fashion, asking himself the various questions suggested. (When conven-

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ient, it is better for the learner to question himself *aloud.*)

What is the title of the piece I wish to commit to memory?

"The Old Oaken Bucket."

What is the first idea of the piece, the idea which I associated with "bucket?"

Heart.

Well, what about "heart?" Is the idea qualified particularly?

No.

What, then, is the next idea in the series?

Scenes.

Any particulars given about "scenes?"

Yes. Scenes "of my childhood."

What is the next idea?

Recollection.

Anything special said about "recollection?"

Yes. "Fond" recollection.

What does "fond recollection" do?

It presents "the scenes of my childhood "to view.

Having impressed upon the mind the series of ideas representing the outline of the composition, and catechized yourself as to some of the details, in the manner suggested, you may now proceed to read over the piece in the usual way. By repeating it over sufficiently often, it will be found that the minor words will readily group themselves in their proper positions around the various ideas: the exact phraseology will be remembered, and the whole task accomplished in a much shorter time, and more intelligent and satisfactory manner, than by the ordinary method of blindly "learning by rote."—(See also Lessons VI and VII.)

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Lesson III.—The Key of Consonants, in numerical order.

The remembrance of numbers and dates is, with many, a seemingly impossible task. Persons whose memories are deficient in one direction, however, usually have mental affinities or capabilities in other directions. Thus, a person with a very poor memory for proper names may have a powerful memory for faces; or a person with a bad memory for numbers and dates may have an effective memory for language. Just as, in the first lesson, it was shown how, by properly directing the Imagination, a person with even the poorest kind of memory for words may effectively remember a long series of words by one careful reading; so we will endeavor to show how persons, utterly unable to remember numbers and dates in the usual way, may remember thousands of them, with great precision, in another way altogether. If persons cannot reach the summit of a tower by one spring from the ground, they can repair to the rear of the building, and reach the summit, just as effectively, by the back stairs. We will show how they may utilize their mental affinity for *language* to enable them to effectively remember *numbers*.

As is well known, the Romans used letters to represent numbers—V for 5, X for 10, L for 50, C for 100, and so on. Although, in the present system, we do not use the same letters as the Romans did to represent the same numbers, we use letters to represent numbers, nevertheless. The numerical basis of the

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present system, called the Key of Consonants, is as follows:—

T*e*, D*e*, 1. N*e*, 2. M*e*, 3. R*e*, 4. L*e*, 5. J*e*, Ch*e*, Sh*e*, Zh*e*, 6. K*e*, Qu*e*, G*e* (hard, as in gig), 7. F*e*, V*e*, 8. P*e*, B*e*, 9. C*e*, S*e*, Z*e*, 0.

All the letters of the alphabet (as sounded) are embraced in the above Key, with the exception of w, h, y; a, e, i, o and u, which are not used, and have no numerical value assigned to them. The final *e* is used merely to give a rythmical sound to each consonant or numerical syllable, so that the various sounds embraced in the Key shall come more harmoniously to the ear. The following series of words contains, in order, all the consonants, or numerical equivalents, embraced in the Key: *T*oa*d*—In*n*—Ha*m*—Oa*r*—Ow*l*—*J*ew, wa*tch*, *sh*oe, A*sia* (sounded with the *z*, like the word azure) *K*ey, *qu*ag—Hoo*f*, hi*v*e—*P*ie, *b*oy—Ice, *s*ea, eye*s*.

In order that the learner may effectively apply the present Method to the remembrance of numbers and dates, it is necessary, at the outset, that the Key of Consonants be thoroughly fixed in the memory. The learner should be able to readily name all the consonants or equivalents for the numbers, giving them, without hesitation, either in their order or promiscuously. In order to facilitate, and render entertaining, the thorough mastery of this Key of Consonants, the author has designed the accompanying Mnemonic Triangle, or Pictorial Pyramid.

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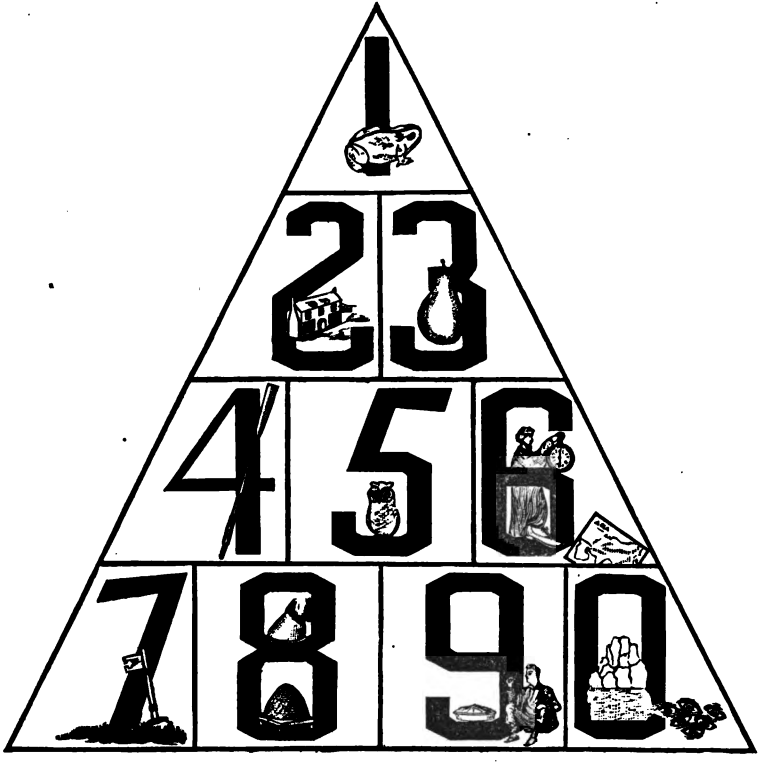

(Copyright 1886, by George Yule.)

1 Toad. 2 Inn. 3 Ham. 4 Oar. 5 Owl.
6 Jew, Watch, Shoe, Asia. 7 Key, Quag.
8 Hoof, Hive. 9 Pie, Boy. 0 Ice, Sea, Eyes.

Learner: We propound to you a number of sim-

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ple Questions upon the Pictorial Pyramid; and, as it is desirable that you should answer all the questions for yourself, the Answers are not printed side by side with the Questions. You may test the correctness of your answers, nevertheless; for the various answers will be found grouped in separate paragraphs, immediately following each group of questions. It is better to read the questions and give the answers *aloud*. Do not be dismayed at the number of questions. They are all very simple.

I. LINES AND NUMBERS.

Questions.—1. In this pictorial diagram what kind of a figure have we before us? Is it a square? Or a circle? 2. How many *numbers* are embraced in the Triangle or Pyramid? 3. What are these numbers? 4. Into how many *lines* is the Pyramid divided? 5. Commencing to count the lines from the apex of the Pyramid, how many numbers are found in the apex of the Pyramid, that is, in the first line? 6. How many numbers are in the second line? 7. How many in the third line? 8. How many in the fourth or base line? 9. What number is in the first line? 10. What numbers are in, say, the third line? 11. What numbers in the second line? 12. What numbers in the fourth line? 13. In the third line? 14. In the first line? 15. In the fourth line? 16. In the second line?

Answers.—1. No. It is a Triangle or Pyramid. 2. Ten. 3. One, Two, Three, Four, etc. 4. Four lines. 5. One. 6. Two. 7. Three. 8. Four. 9. One. 10. Four, Five and Six. 11. Two and Three. 12. Seven, Eight, Nine and Cipher. 13. Four, Five,

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and Six. 14. One. 15. Seven, Eight, Nine and Cipher. 16. Two and Three.

II. NUMBERS AND THEIR ASSOCIATED OBJECTS.

Questions.—1. What is the object associated with number One? 2. What are the objects associated with number Naught, Zero, or Cipher? 3. What is associated with number Five? 4. What with number Two? 5. What with number Six? 6. What with number Three? 7. What with number Nine? 8. What with number Seven? 9. What with number Four? 10. What with number Eight?

Answers.—1. Toad. (Not Frog, but Toad.) 2. Ice, Sea, Eyes. 3. Owl. 4. Inn. 5. Jew, Watch, Shoe, Asia (sounded with the z, like the word azure.) 6. Ham. (Not Pear, but Ham.) 7. Pie, Boy. 8. Key, Quag (quagmire.) 9. Oar. 10. Hoof, Hive.

III. THE CONSONANTS, SYLLABLES, OR NUMERICAL EQUIVALENTS CONTAINED IN THE NAMES OF THE OBJECTS OF THE PYRAMID.

Questions.—1. Taking the words, not as actually spelt, but as if spelt *according to sound*; and throwing out, where they occur, the letters w, h, y; a, e, i, o and u, which, as already stated, have no numerical value or significance in this System: What numerical equivalents, consonants, or syllables are left in the word Toad? 2. In the same way, what are the numerical syllables contained in the words Hoof, Hive? 3. In Jew, Watch, Shoe, Asia? 4. In Pie, Boy? 5. In Ham? 6. In Oar? 7. In Ice, Sea, Eyes? 8. In Inn? 9. In Key Quag? 10. In Owl?

Answers.—1. te, de. 2. fe, ve. 3. je (as in George)

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che, she, zhe. 4. pe, be. 5. me. 6. re. 7. ce, se, ze. (It will be observed that ce and se represent the same sound.) 8. ne. 9. ke, que, ge (hard, as in gorge.) 10. le.

IV. THE NUMBERS AND THEIR EQUIVALENTS.

Questions.—1. Recalling to mind, as called for, the Objects associated with the respective numbers, but giving utterance only to the Numerical Equivalents contained in the Names of the Objects: What is the Consonant, Syllable, or Numerical Equivalent associated with, say, number Three? 2. With number Seven? 3. With number Six? 4. With number One? 5. With number Naught or Cipher? 6. With number Five? 7. With number Two? 8. With number Nine? 9. With number Four? 10. With number Eight?

Answers.—1. me. (The fact that the letter m is a union of three strokes will further assist the beginner to remember that m is 3.) 2. Ke, que, ge. (It will be noticed that, in outline, the Key in the Pictorial Pyramid resembles the shape of number 7.) 3. je, che, she, zhe. 4. te, de. 5. ce, se, ze. 6. le. 7. ne. (The fact that the letter n is a union of two strokes will further assist the beginner in remembering that n is 2.) 8. pe, be. 9. re. 10. fe, ve.

Learner: Having gone carefully over these simple exercises, and got the pictures of the Pyramid, with their respective locations, well fixed in "the mind's eye," read over the series of questions once more. This time, however, answer them all from memory entirely, and do not look either at the Pictorial Pyramid or at the printed answers. When you have

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done this you will have the Numerical Basis of the present System well impressed upon the mind; and will be able to repeat the Key of Consonants from memory, not in its order, only, but promiscuously. Having once acquired it, however, it is advisable for beginners to seek to deepen the impression of the Numerical Basis, by occasional revision.

Lesson IV.—Further Exercise on the formation of words into the Syllables embraced in Key of Consonants, and Translation of words into Numbers.

Observe that the words, in every instance, are to be taken, not according to actual spelling, but as if spelt phonetically, or according to *sound*. Tch is sounded che and reckoned 6; as in *ditch*, which is 16. Ng is sounded ge (hard) and reckoned 7; as in *ring*, which is 47. S commencing a word has no numerical value; as in *satin*, which is 12. Double letters are reckoned as single letters; as in *funny* which is 82: but where the double letters belong to separate and distinct articulations, each letter has its numerical value; as in *thinness*, which is 1220, and not 120. On the same principle, while *singing* is 77, *single* is 775.

Exercise.—Change the following words into syllables, and translate them into figures. Hat, home, lily, wind, fog, piano, honey, diocese, eagle, shadow,

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ditch, knob, tomb, wigwam, harrow, axe, wedding, sack, thinness, hunger, lingo, yankee, single, angle.

The syllables and figures are as follows: Hat, te, 1. Home, me, 3. Lily, le-le, 55. Wind, ne-de, 21. Fog, fe-ge, 87. Piano, pe-ne, 92. Honey, ne, 2. Diocese, de-ce-se, 100. Eagle, ge-le, 75. Shadow, she-de, 61. Ditch, de-che, 16. Knob, ne-be, 29. Tomb, te-me, 13. Wigwam, ge-me, 73. Harrow, re, 4. Axe, ke-se, 70. Wedding, de-ge, 17. Sack, ke, 7. Thinness, te-ne-ne-se, 1220. Hunger, ge-ge-re, 774. Lingo, le-ge-ge, 577. Yankee, ge-ke, 77. Single, ge-ge-le, 775. Angle, ge-ge-le, 775.

Learner: In order that you may speedily arrive at a state of familiarity with the Method, in which you will be able to use language and numbers interchangeably, with perfect readiness and ease, we recommend you to occasionally take up passages from books, newspapers, etc., and exercise yourself in turning the composition into numbers. Such an exercise will entirely supersede any further exercise upon the Key of Consonants, or upon the Pictorial Pyramid. Any piece of composition—prose or verse—may be readily turned into numbers on the basis of the Key of Consonants. At first, it is well to perform this exercise *aloud;* but, afterwards, it is better to exercise mentally only, that is, in silence: the reason being that, when you come to put the numerical method into practical application, the process of changing words into numbers will be conducted mentally; utterance being given only to the resultant numbers or dates. In the exercise of changing words into numbers, observe, in the first place, to turn the word into its nu-

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merical syllables; following—as in the example given above—with the numbers represented by the syllables.

Lesson V.—Table of Fixed Ideas, the Numerical Syllables of which express the numbers from 1 to 100.

1. Hat	22. Nun	43. Army
2. Honey	23. Gnome	44. Orrery
3. Home	24. Scenery	45. Rail
4. Harrow	25. Snail	46. Arch
5. Hill	26. Niche	47. Rock
6. Watch	27. Snake	48. Roof
7. Oak	28. Knife	49. Rope
8. Ivy	29. Knob	50. Lass
9. Abbey	30. Moose	51. Lead
10. Woods	31. Meadow	52. Lion
11. Tide	32. Moon	53. Loom
12. Ætna	33. Mummy	54. Lyre
13. Tomb	34. Hammer	55. Lily
14. Stair	35. Mill	56. Lash
15. Idol	36. Mush	57. Lock
16. Ditch	37. Hammock	58. Loaf
17. Wedding	38. Muff	59. Lobby
18. Dove	39. Map	60. Cheese
19. Tub	40. Horse	61. Shadow
20. Noose	41. Road	62. Chain
21. Net	42. Rhine	63. Gem

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64. Chair
65. Jail
66. Judge
67. Jug
68. Sheaf
69. Ship
70. Axe
71. Gate
72. Gun
73. Wigwam
74. Car
75. Eagle
76. Cash
77. King
78. Cave
79. Cape
80. Vase
81. Vat
82. Fan
83. Foam
84. Fur
85. Vale
86. Fish
87. Fog
88. Fife
89. Fop
90. Piazza
91. Boat
92. Piano
93. Palm
94. Opera
95. Bell
96. Bush
97. Book
98. Beef
99. Pipe
100. Diocese.

Learner: The series of words contained in the above Table may be easily committed to memory by a single careful reading, by the means explained in Lesson I. Having fixed the series in the memory by the means explained in the first lesson, you will be able to repeat the Table in consecutive order, from beginning to end, or backwards. Moreover, having already acquired the Numerical Basis or Key of Consonants, you will be able, without any additional study of the Table, to give the numbers in which each word stands: for, upon examination, it will be found that the series is so arranged that the words themselves, by reason of the numerical syllables contained in each, declare the numerical position which they respectively occupy. It is intended that those who wish to become adepts in the use of the present System shall acquire this Table of Fixed Ideas in a permanent manner; for it will be brought into constant requisition. In order to obtain the full use of this series of Fixed Ideas, however, it

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is not only necessary for you to be able to readily repeat the Table from beginning to end, forwards and backwards; and be competent to instantly give the number in which any word stands; but it is also desirable that you should be able to give the various words promiscuously, upon their respective numbers being furnished. This latter can be perfectly effected only by practice. At the very outset, however, upon promiscuous numbers being given, you may be able, in many cases, to give the words representing the numbers. This you may do by reflecting as to what numerical letters or syllables are required to be embraced in the word called for, in order that it will represent the number given. Thus, if the Fixed Idea representing No. 22 be called for, you will know that the word must contain n–n: and, by trying the insertion of the various vowels, you may easily call up the word *Nun*. In the same way, if the Fixed Idea representing No. 32 be called for, you will know that the word must contain m—n: and by trying, as before, the insertion of the various vowels, you may call up the word *Moon*. It will be found, however, that practice is necessary to enable you to readily name the respective words for the various numbers, promiscuously given. The Table of Fixed Ideas, then, should be thoroughly mastered—numbers and words. The student should practice it, in order and promiscuously, till he knows readily the word for each number—till he can tell instantly, that, for instance, the nineteenth word is Tub, the fifty-fifth Lily, the thirtieth, Moose, and so on. He should also be able to rapidly translate the words into numbers thus: Book, 97; Loom, 53; Mill, 35; Chair, 64.

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As, however, it is seldom that, in practical use, the whole series of one hundred Fixed Ideas is brought into requisition, you may, at the outset of your experience with the present System, confine your attention to the first half of the Table, and seek to get the ideas from 1 to 50 thoroughly fixed in your mind.

In Lesson I it will be remembered that you took up a random series of simple words, and associated the ideas with each other in a consecutive chain. A chain of ideas, so associated, you found that you could repeat correctly from memory in consecutive order, either forwards or backwards. You could not, however, by the method of association employed in Lesson I, give any word of the series *promiscuously*: you could not, for instance, tell which was the seventeenth word of the series, or the eleventh, or the thirty-ninth, or the twenty-second. In the present lesson, however, we will take, as an extemporaneous exercise, a fresh series of simple words; and by associating the various ideas with the Fixed Ideas of the Table, we will commit them to memory in such a manner as to be able to repeat them, in order, forwards and backwards; and also promiscuously. When you shall have mastered the Table, and got it thoroughly fixed in your mind, that is, when the series of Fixed Ideas shall have become, in reality, fixed and established ideas in your mind; you will be able to accomplish an exercise such as the following without looking at, or referring to, the Table at all. In the meantime, however, seeing that you have not yet mastered the Table, you will have to keep it before you, and refer to it.

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The series of words we are now about to take up, as an exercise upon the application of the Table of Fixed Ideas, we will take up, not consecutively as was done in the first lesson, but promiscuously. The words we are about to give, moreover, you will not associate with each other, as you did in the first lesson, but you will link them, one by one, with the Fixed Ideas of the Table. If we commence by telling you that the nineteenth word of the series to be memorized is *Molasses*, you will, by the process of mental picturing already explained, associate the idea Molasses with the nineteenth Fixed Idea, which is Tub: if we say that the thirty-first word of the series to be now memorized is *Hay-rick*, you will associate the idea Hay-rick with the thirty-first Fixed Idea, which is Meadow: if we say that the ninth word of the series to be memorized is *Spider*, you will associate the idea Spider with the ninth Fixed Idea which is Abbey. Proceed in the same way through the entire series given below, associating each word, as it occurs, with the Fixed Idea corresponding to its number.

19. molasses	30. pitchfork	17. Jesuit
31. hayrick	23. dance	5. horseshoe
9. spider	12. press	13. sponge
16. filter	8. dog	20. cage
25. safe	15. giant	29. beefsteak
2. ring	21. treaty	22. torch
11. logs	10. Adam	3. teapot
32. obelisk	24. lobster	27. trumpet
18. jar	33. tinware	14. bellman
26. brush	6. mud	4. theatre
7. plow	1. parrot	28. fleece.

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Having gone carefully over the above series, in the order in which it stands, and associated each idea with its numerically corresponding Fixed Idea, you will now be able to repeat the entire series from memory; not in the order in which you took it up, but in its consecutive numerical order, beginning with the first word "parrot," and continuing on, in consecutive numerical progression, till the thirty-third word, "tinware," is reached. If you have the Table of Fixed Ideas really fixed in the mind, you will be able to do this exercise entirely from memory, repeating the series given above by recalling the Fixed Ideas to mind, one by one, in consecutive numerical order. If, however, you do not have the Table of Fixed Ideas actually fixed in the mind, you will have to keep the Table before you, and, by looking at it, repeat the series of words which you have just associated with it. In each case the Fixed Idea will serve to recall to mind the idea which has been associated with it; and the entire series of words given above may be repeated from memory, forwards, backwards, or promiscuously. If, for instance, the fifteenth word is called for, you will recall to mind the fifteenth Fixed Idea; which, being brought up, will recall the word which you have associated with it, the fifteenth word of the series, namely, *giant.*

If, on the other hand, a certain word of the series be mentioned, and its *number* called for,—the word "trumpet," for instance—you will recall the Fixed Idea with which you have associated the idea "trumpet" (namely Snake) and the number of the Fixed Idea will represent or indicate the number in

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which the word "trumpet" stands in the foregoing series.

It is thus seen that if, by one careful reading, a series of ideas be associated in the manner which has been explained, a person familiar with the Table of Fixed Ideas, and with the respective numbers of the various Fixed Ideas, will be able to repeat the series from memory, forwards and backwards, in numerical order. He will be able, also, to give the words of the series promiscuously. If asked, for instance, what is the thirty-ninth word he has just committed to memory, or the seventy-sixth, or the twenty-fourth, he will be able to give it readily. Moreover, any word of the memorized series being given, he will be able to give instantly the number in which it stands.

Lesson VI.—The Remembrance of Lectures and Speeches, Verbal Reporting, and Speaking without Notes.

The substance of lectures, speeches, etc., may be remembered with surprising fulness and accuracy by means of the Table of Fixed Ideas. To do so, take up the various divisions of the lecture or speech, and associate the first thought of each division with its respective Fixed Idea, and the remaining thoughts of each division with the first thought, and with each other, thus:

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1. Hat—*Ship—Dock—Friends—Tears—Storm.*
2. Honey—*Cottage—Maiden—Hope.*
3. Home—*Island—Wreck—Hunger—Despair.*

Proceed in the same way through the entire composition. In order, afterwards, to repeat the substance of the lecture or speech, or write a report of it from memory, begin by recalling the first Fixed Idea, and immediately its chain of thoughts will come to mind, link by link. Having followed out the first train of ideas to its termination, proceed to recall the second Fixed Idea, and the train of thoughts associated with *it* will rise before the mind in the same way. And so on to the end. The Method just explained is applicable, also, to speaking without notes. A lawyer who is familiar with the Table of Fixed Ideas, and practised in using it, may have the leading points, or outline, of his speech so laid out in his mind, and so completely at his command, that, although he may be interrupted many times in the course of his address, he will not have his ideas disarranged; but will be able, each time, to readily revert to the exact point at which he left off.

In the memorization of speeches and sermons, although it is proper to have the whole matter thought out in advance of delivery, it is not recommended to do more than memorize the outline or skeleton of the composition. To make a practice of memorizing speeches or sermons *verbatim*, and delivering them parrot fashion, destroys the prospect of gradually acquiring the coveted power of thinking and speaking before the public, naturally, freely, extemporaneously and effectively. While some, by the influences of

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heredity, may have a greater natural aptitude for public speaking than others, effective public speaking is an art and a science, to be acquired slowly and gradually. The so-called "gift" of oratory, as usually exhibited before the public by distinguished speakers, is far more the result of experience and practice than anything else; and comes through the operation of the every day law of cause and effect, just as much as the skill of the artificer, or the deftness of the mechanic. Skill in speaking, as in other things, is simply experience crystalized, so to speak. If, therefore, any one would reap the "gift" of oratory, he must give heed as to how he sows.

In the example given above, a chain of several ideas was associated with each Fixed Idea. It is discretionary, however, whether that plan shall be adopted, or whether but a single idea shall be associated with each Fixed Idea, thus:

1. Hat—*Ship.*
2. Honey—*Dock.*
3. Home—*Friends.*
4. Harrow—*Tears.*
5. Hill—*Storm.*
6. Watch—*Cottage.*
7. Oak—*Maiden.*
8. Ivy—*Hope.*
9. Abbey—*Island.*
10. Woods—*Wreck.*
11. Tide—*Hunger.*
12. Ætna—*Despair.*

In place, however, of using the Fixed Ideas given in the Table of Fixed Ideas, we may take the ideas occurring in a piece of composition which is already well known to us, and let them serve as Fixed Ideas with which to associate other ideas we desire to remember. Although this plan is not recommended, we give an example of a piece of composition which

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may be employed for the purpose alluded to. In the following piece the words which may be used as Fixed Ideas are printed in italics.

So live, that when thy *summons* comes to join
The innumerable *caravan*, that moves
To that mysterious *realm*, where each shall take
His *chamber* in the silent *halls* of death,
Thou go not, like the *quarry-slave* at *night*,
Scourged to his *dungeon;* but, sustained and soothed
By an unfaltering *trust*, approach thy *grave*,
Like one who wraps the *drapery* of his *couch*
About him, and lies down to pleasant *dreams*.

A preacher, however, may, with very good effect, adopt the plan of associating the ideas which form the outline of his discourse with the prominent words or ideas of the printed page of the Bible lying open before him upon the desk. Instead of impressing the outline of his discourse upon his memory by using the Table of Fixed Ideas given in the present work, he may, at any time, in preparing a sermon, extemporize an effective series of Fixed Ideas from the page of the Bible which, during delivery of the sermon, will naturally lie open before him upon the desk. Having underlined, or otherwise prominently marked, a suitable series of words contained in the page which he intends shall lie open before him, he may use the series as a table of fixed ideas with which to associate the outline of his discourse. In delivering his sermon, he may refer, whenever necessary, to these underlined or marked words upon the page before him; and the ideas which he has previously associated with them will be effectively brought to mind. Thus, the outlines or substance of sermons may be effectively re-

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membered by preacher or hearer without using notes. The plan suggested offers the further advantage of affording a *fresh series* of Fixed Ideas, "memory pegs," or mental pigeon-holes, for use in memorizing the outline of each sermon, thus diminishing the risk of confusion of ideas. Of course, in applying the principles of association to sacred matters, the same latitude of imagination as is allowable in other matters is not permissible. Each person, however, ought to be able to lay down the lines of propriety for himself. Below is given, by way of illustration, a brief extract from the Bible, having a few of the prominent ideas underlined for use as fixed ideas. The extract is taken from the Book of the Prophet Ezekiel.

CHAPTER XXXVII.

The resurrection of dry bones.

The hand of the Lord was upon me, and carried me out in the Spirit of the Lord, and set me down in the midst of the valley which was full of bones.

2. And caused me to pass by them round about; and, behold, there were very many in the open valley; and, lo, they were very dry.

3. And he said unto me, Son of man, can these bones live? And I answered, O Lord God, thou knowest.

4. Again he said unto me, Prophesy upon these bones, and say unto them, O ye dry bones, hear the word of the LORD.

5 Thus saith the Lord God unto these bones; Behold, I will cause breath to enter into you and ye shall live:

6. And I will lay sinews upon you and will bring up flesh upon you, and cover you with skin, and put breath in you, and ye shall live; and ye shall know that I am the Lord.

7. So I prophesied as I was commanded: and as I prophesied, there was a noise, and behold a shaking, and the bones came together, bone to his bone.

8. And when I beheld, lo, the sinews and the flesh came up upon them, and the skin covered them above: but there was no breath in them.

9. Then said he unto me, Prophesy unto the wind, prophesy, son of man, and say to the wind, Thus saith the LORD GOD: Come from the four winds, O breath, and breathe upon these slain, that they may live.

10 So I prophesied, as he com-

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manded me, and the breath came into them, and they lived, and stood upon their feet, an exceeding great army.

11. Then he said unto me, Son of man, these bones are the whole house of Israel: behold they say Our bones are dried, and our hope is lost; we are cut off for our parts

12. Therefore prophesy and say unto them, thus saith the LORD GOD; Behold, O my people, I will open your graves, and cause you to come up out of your graves, and bring you into the land of Israel.

13. And ye shall know that I am the LORD, when I have opened your graves, O my people, and brought you up out of your graves,

14. And shall put my Spirit in you, and ye shall live, and I shall place you in your own land: then shall ye know that I the LORD have spoken it, and performed it, saith the LORD.

Lesson VII.—Association applied to Thoughts or Ideas of a more subtile nature.

In previous lessons we have dealt with the principle of Association mainly in regard to its application to such words as call up in the mind distinct objects or pictures. We will now proceed to utilize the Table of Fixed Ideas in applying the principle of association to thoughts or ideas of a more subtile nature. For illustration, we will take an extract from one of Southey's pieces, often met with in reading selections, as the composition in question is conceded to be one of the most difficult pieces to remember correctly that can be found.

In poetical composition, usually, the ideas of one line lead up to, and glide so easily and naturally into the ideas of the following line; and, moreover, the versification is of such a structure and rhyme,

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that it is a comparatively easy matter to memorize verse. For this reason rhyme, or verse, is often employed for no other purpose than to serve as an aid to the memory. It is well known that children, as well as older persons, will learn prosaic facts when woven into rhyme much more readily and willingly than if the same series of facts be administered to them in a more prosaic form. Although usually, however, poetical composition is easier to memorize than prose composition, the following extract from Southey is an exception to the rule. As has been already said, it is conceded to be one of the most difficult pieces to remember correctly that can be found. In it, the ideas of one line do not lead up to, and glide so inevitably into, the ideas of the following line as to make the piece easy of memorization. It will be seen that, upon the contrary, the various lines, for the most part, may be taken in disjunction. The majority of the lines in the several divisions might be easily transposed or interchanged without the transposition being detected by the learner.

The tendency of the human mind to "fly off at a tangent" on the slightest provocation is well known. The power of mental guidance, concentration and control is the fruit of mental discipline; and depends upon the giving heed to the individual ways, and the continued exercise of the individual will in regard thereto. Men are by nature dreamers, and the untutored human mind is like a wild horse of the plains, restlessly roaming, hither and thither, upon the expansive fields of disordered thought and seductive imagination. But the tendency of the human mind to "fly off at a tangent," upon slight provocation, is

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not to be deprecated altogether, by any means. Like fire, the tendency in question, although a bad master, is a good servant. While the undisciplined mind, by reason of this natural tendency to "wander," or "fly off at a tangent," is made to bear prominently the unfortunate characteristic of lack of concentration; the disciplined mind, on the other hand, recognizes in the ordinary exhibition of the tendency in question nothing more than the untutored operation of a quality of the mind that is capable of culture; and that when cultured is invaluable. If men were so constituted that they could only think in long straight lines, or in unvarying circles, they would be dull fellows indeed; and if they experienced difficulty in turning their thoughts off at a tangent, from one channel to another, the human mind would not be so perfect a creation as it is. As it is, however, the mind is like a noble steed that, on the one hand, may be allowed to run wild, and range at random over the wide prairies of the imagination; or that, upon the other hand, may be trained and disciplined to obey the guiding rein of a ruling will. Whilst, then, the tendency of the human mind to wander, or fly off at a tangent, ever and anon, may be an unfortunate tendency, so far as undisciplined minds are concerned; the power of sharply turning the mind at will from a main line of thought into this channel or that, and of returning again, at pleasure, into the main line of thought, is a power which is invaluable and indispensable. The following piece, taken in connection with the explanatory remarks which succeed it, is given as an illustration of the manner in which the memory may be made to run along a main line of thought; and be read-

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ily switched at will, at this point, or at that, on to radiating lines of thought, or trains of ideas.

THE CATARACT OF LODORE.

1. Here it comes sparkling,
2. And there it lies darkling,
3. Here smoking and frothing,
4. Its tumult and wrath in,
5. It hastens along, conflicting, strong,
6. Now striking and raging,
7. As if a war waging,
8. Its caverns and rocks among.

9. Rising and leaping,
10. Sinking and creeping,
11. Swelling and flinging,
12. Showering and springing,
13. Eddying and whisking,
14. Spouting and frisking,
15. Twining and twisting,
16. Around and around.
17. Collecting, disjecting,
18. With endless rebound;
19. Smiting and fighting,
20. A sight to delight in,
21. Confounding, astounding,
22. Dizzing, and deafening the ear with its sound.

23. Reeding and speeding,
24. And shocking and rocking,
25. And darting and parting,
26. And threading and spreading,
27. And whizzing and hissing,
28. And dripping and skipping,
29. And whitening and brightening,
30. And quivering and shivering,
31. And hitting and splitting,
32. And shining and twining,
33. And rattling and battling,
34. And shaking and quaking,
35. And pouring and roaring,
36. And waving and raving,
37. And tossing and crossing,

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38. And flowing and growing,
39. And running and stunning,
40. And hurrying and scurrying,
41. And glittering and flittering,
42. And gathering and feathering,
43. And dinning and spinning,
44. And foaming and roaming,
45. And dropping and hopping,
46. And working and jerking,
47. And heaving and cleaving,
48. And thundering and floundering;

49. And falling and crawling and sprawling,
50. And driving and riving and striving,
51. And sprinkling and twinkling and wrinkling,
52. And sounding and bounding and rounding,
53. And bubbling and troubling and doubling,
54. Dividing and gliding and sliding,
55. And grumbling and rumbling and tumbling,
56. And clattering and battering and shattering;

57. And gleaming and steaming and streaming and beaming,
58. And rushing and flushing and brushing and gushing,
59. And flapping and rapping and clapping and slapping,
60. And curling and whirling and purling and twirling,
61. Retreating and beating and meeting and sheeting,
62. Delaying and straying and playing and spraying,
63. Advancing and prancing and glancing and dancing,
64. Recoiling, turmoiling, and toiling and boiling,
65. And thumping and flumping and bumping and jumping,
66. And dashing and flashing and splashing and clashing,
67. And so never ending, but always descending,
68. Sounds and motions forever and ever are blending,
69. All at once and all o'er, with a mighty uproar—
70. And this way the water comes down at Lodore.

Each line of the above piece is numbered for convenience in associating the respective lines with the Table of Fixed Ideas; and the design is for the learner to memorize the piece, as an exercise, in such a way as to be able not only to repeat the poem in

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consecutive order, but to repeat it, line by line, backwards; or to instantly repeat *any* line promiscuously, upon its number being given. To memorize the foregoing piece in such a manner as to attain this end, do not, as a preliminary, attempt to make an outline or chain of *particular* ideas of the piece, as was done in Lesson II. The method of memorization employed in Lesson II. cannot be suitably applied to the present piece of composition. Upon the contrary, the present piece must be memorized, mainly, by repetition. To memorize it, however, in such a way as to be able to repeat it line by line forwards, or line by line backwards, or line by line promiscuously, begin with the first line and associate the *general idea* of the first line (not merely one *particular* idea occurring in the line) with the first Fixed Idea thus:

Hat—Here it comes sparkling.

Now, the associating of the general idea, that something "comes sparkling," with the fixed idea "Hat," is a somewhat more subtile operation of the mind than the associating together of two clear and distinct mental images or pictures. A bond of association, however, will not be difficult to find,—especially to the fertile imagination. If, laying aside, for the time being, any connection of the various lines of the foregoing piece with the remainder of the composition, or, even, with the subject or title of the poem, we memorize each line as if it referred only to the numerically corresponding Fixed Idea: when, for instance, we come to take up the first line, "Here it comes sparkling," and desire to associate the general idea contained in the line with the fixed idea "Hat," we have in "Hat" a distinct mental image, and in the

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line "Here it comes sparkling," a more or less distinct idea concerning that image. Bringing the imagination into play, the idea "Hat" may well suggest the idea "Here it comes sparkling." For example, a youth's visit to a hat store may be pictured in the mind's eye. We may suppose that a notable crisis has arisen in the youth's career; a crisis marking an epoch in his existence:—he has summoned up courage to make a new departure in life; and is about to indulge in his first tall hat! Upon the intending purchaser making known to the hatter his desire to try on a silk hat, we see the hatter promptly retire to the rear of the store. With his back to the youth, we see him take a new hat from a bandbox, and after brushing it up deftly, with the graceful flourish peculiar to hatters, he sharply turns about and carries the shining piece of headgear towards his youthful customer; who, seeing it coming, mutters to himself, in suppressed excitement, mingled with profound admiration,

"Here it comes sparkling!"

In a somewhat similar manner, the respective general ideas conveyed by the successive lines of the composition may each be associated with its corresponding Fixed Idea, thus:

Hat—Here it (the hat) comes sparkling.
Honey—And there it (the honey) lies darkling.
Home—Here smoking and frothing.
Harrow—Its tumult and wrath in.

If "The Cataract of Lodore" be memorized in the manner indicated, the Table of Fixed Ideas will serve as a *prompter*, affording the learner a ready *clue* to

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each line in its order; and enabling him to switch his mind instantly, and promiscuously, on to any particular line. Having been memorized in the manner explained, the piece may be correctly repeated from memory from beginning to end; it may be repeated, by lines, backward; any number being given, the line corresponding to that number may be recited; and, *vice versa*, any line being recited, the number corresponding to that line may be given.

Lesson VIII.—The remembrance of Proper Names, Foreign Vocabularies, Technical and Scientific Terms, etc.

Many proper names—that is, names of persons, places, countries, states, seas, rivers, mountains, etc., —by reason of their readily conveying to the mind clear and distinctive images or ideas, are capable of being memorized, in series, as easily as the names of common objects. Among the names of persons, for instance, which are capable of being thus easily memorized, may be cited such as these:—Butler, Bell, Wolff, Field, Berry, Church, Crane, Glass, Rose, Bird, Hay, Reed, Swan, Dyer, Hart, Ford, King, Eagle, Woods, Snow, Taylor, Barnes, Mill, Fisher, Wells, Miller, Bush. Each of the names mentioned—either by their actual spelling, or through their actual sound—are capable of calling up in the mind definite

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images or ideas, individually peculiar to themselves. The image or picture called up by the name Swan, for instance, is quite clear and definite; and there is no likelihood of its becoming confused in the mind with that other image or picture called up by the name Bell, for instance. There are, however, a large number of proper and other names which, being purely arbitrary in construction (at least to the reader who is not acquainted with their derivations) are not capable of calling up in the mind any image or idea whatever, much less any *clear and distinctive* mental picture, image, idea, or impression. For example, there is nothing in the name "Thompson" (when not associated in our minds with any particular person of that name) to call up any image; much less is there anything in the name Thompson, beyond the mere letters of which it is composed, to convey to our mind's eye any definite impression, idea or image which is altogether separate and distinct from that which may be conveyed by the name Robertson, or the name Wilson. When, therefore, such seemingly arbitrary names occur in a series to be memorized, means have to be devised to render them capable of affording, suggesting or conveying to the mind distinctive images, pictures or impressions; that is, images, pictures or impressions which shall be peculiar to themselves, and not liable to get mixed up with the ideas suggested or conveyed by other words.

As has been already demonstrated in preceding lessons, words conveying to the mind clear impressions, images or ideas, distinctively peculiar to themselves—as horse, balloon, tree—are easily associated

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with other words like boat, umbrella, basket. But, where we have a number of words, or names, such as Barcelona, Raphael, Hartlepool, Hyderabad, Tippecanoe, Bombay, Bremen; and with such words, or names, we desire to associate other words, the principle of "Homophonic Analogy" may be brought into use. A homophonic analogy is a word or phrase of a *like sound* (or of a sound as like as possible) to the original word from which it is derived, or by which it is suggested; but which is capable of conveying to the general mind a more distinctive and clear image or impression than the original word. Thus, if the original word to be memorized be Barcelona, it may be represented by the homophonic analogy Prima donna; if the original word be Raphael, the homophonic analogy may be Rifle; if the original be Hartlepool, the homophonic analogy may be Hart-at-a-pool; if the original be Hyderabad, the homophonic analogy may be A-bad-hydrant; if the original be Tippecanoe, the homophonic analogy may be Tipped-canoe; if the original be Bombay, the homophonic analogy may be Bamboo; if the original be Bremen, the homophonic analogy may be Brahmin. To the general mind, the homophonic analogies suggested for the above names are capable of presenting more definite images or impressions than the names themselves. If, however, a person be so well acquainted with the city of Barcelona that the name "Barcelona" presents to his mind an image, idea or impression, which is not only clear in itself, but is such as to effectually distinguish Barcelona in his mind from all other places or cities, he need not employ a homophonic analogy in that instance. The same remark applies, also, to

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the other names Hartlepool, Hyderabad, Tippecanoe, Bombay, and Bremen. Or if, again, a person be so well acquainted with the historic personality of Raphael that the name "Raphael" presents or recalls to his mind an image, impresion or idea, that is not only clear in itself, but is such as to effectually distinguish in his mind the personality of Raphael from all other personalities, historic or otherwise, he need not employ a homophonic analogy in that instance. In all cases where the name of person, place or thing presents directly to the mind an image, impression or idea sufficiently clear and distinctive in itself, resort to the indirect assistance afforded by homophonic analogies is, of course, entirely unnecessary. In other cases, however, homophonic analogies may be advantageously employed as guides, leaders, or conductors to the memorization of the ultimate or original ideas.

But there are many instances in which clear and distinctive images, impressions or ideas may be connected with apparently arbitrary names without using homophonic analogies. There are many instances in which a name may be made to present or recall to the mind a perfectly clear and distinctive impression or idea, peculiar to itself, and not liable to get mixed up with the impressions or ideas conveyed by, or connected with, other names. This may be done by taking something which we well know to be, in actual fact, connected with the original name. For example: Havana may be represented by Havana cigars: London, by Tower of London; Utah, by Mormon; Geneva, by Geneva watches; Brussels, by Brussels carpet.

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In order to afford a practical and useful exercise in memorizing a series of words or names by the application of the principles of analogy (homophonic and otherwise) which have just been explained, we now give

THE STATES AND TERRITORIES OF THE UNITED STATES OF NORTH AMERICA.

1. Alabama	18. Kansas	35. North Carolina
2. Alaska	19. Kentucky	36. Ohio
3. Arizona	20. Louisiana	37. Oregon
4. Arkansas	21. Maine	38. Pennsylvania
5. California	22. Maryland	39. Rhode Island
6. Colorado	23. Massachusetts	40. South Carolina
7. Connec't	24. Michigan	41. Tennessee
8. Dakota	25. Minnesota	42. Texas
9. Delaware	26. Mississippi	43. Utah
10. D. of Col.	27. Missouri	44. Vermont
11. Florida	28. Montana	45. Virginia
12. Georgia	29. Nebraska	46. Washington T.
13. Idaho	30. Nevada	47. West Virginia
14. Illinois	31. N. Hampshire	48. Wisconsin
15. Indiana	32. New Jersey	49. Wyoming.
16. Indian T.	33. New Mexico	
17. Iowa	34. New York	

The series of names given above may be memorized by associating it in a continuous chain as taught in Lesson I; or on the other hand (by those who have already acquired the Table of Fixed Ideas) it may be memorized by associating each idea of the series with its corresponding Fixed Idea, according to the Table given in Lesson V. As, however, it may be more beneficial to associate the series numerically, with the Table of Fixed Ideas, we have numbered it for that

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purpose. We now proceed to suggest distinctive analogies, intermediaries, or representative ideas, for the various names of the series. The learner should acquaint himself with the analogies, or representative ideas, before he attempts to memorize the series of original names; for, once he has familiarized himself with the analogies or intermediaries, he will be able to easily memorize the entire series of original names, in its exact order, by one careful reading.

Alabama.—The Confederate cruiser, *Alabama*, which worked so much havoc among United States shipping during the Civil War and was finally sunk by the Kearsarge, will afford a distinct representative idea. To represent or recall to the mind the name of the State of Alabama, associate the idea or mental image of the cruiser Alabama with Fixed Idea No. 1.

Alaska.—*A Lascar.* A native seaman of India. To represent, recall or suggest to the memory the name Alaska, associate the idea Lascar with Fixed Idea No. 2.

Arizona.—*Quarries' owner.* A man may be pictured as carefully surveying a system of stone quarries. He is the "quarries' owner." Associate Quarries' owner with Fixed Idea No. 3.

Arkansas.—*Ark.*

California.—*Cauliflower.*

Colorado.—*Colors.*

Connecticut.—*Connecting Cut.* A new line of railroad may be seen. The road is intended to run right through a certain hillside; and the track is finished north and south of the hill. A cut is made through the hillside, and it becomes a "Connecting Cut" between the two sections of track which before

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were separated by the intervening hill. Associate the idea Cut with Fixed Idea No. 7, and remember that the Cut is a Connecting Cut.

Dakota.—*Sack-coat.*

Delaware.—*Delft-ware.* A coarse kind of porcelain, originally made at Delft.

District of Columbia.—*Columbia*; as seen on coins, etc.

Florida.—*Flowers.*

Georgia.—*King George.* There were four of them and you may take your choice.

Idaho.—*Hide a hoe.* Associate the idea Hoe with Fixed Idea No. 13; and, if you have a bad memory, be careful to remember that it is not advisable for you to hide a hoe if you wish to find it again.

Illinois.—*Silly toy.*

Indiana.—*Indian.*

Indian Territory.—*Indian Territory*, studded with wigwams.

Iowa.—*A byway.*

Kansas.—*Handsaws.*

Kentucky.—*A penned turkey.*

Louisiana.—*Moose Diana.* Associate the idea Moose with Fixed Idea No. 20; and remember, incidentally, that the name of the Moose is Diana.

Maine.—*Mane.*

Maryland.—*Fairyland.*

Massachusetts.—*Mass of goose eggs.*

Michigan.—*Fishy bun.*

Minnesota.—*Bin of soda.*

Mississippi.—*The Mississippi River.*

Missouri.—*History.* (A thick, conspicuous volume).

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Montana.—*Mountain.*

Nebraska.—*Knee-brasses.* In a suit of brass plate-armour, the knee guards, or coverings to protect the knee joints.

Nevada.—*Armada.* The Spanish Fleet sent against England, in 1588.

New Hampshire.—*New Hamper.*

New Jersey.—*A new Jersey cow.*

New Mexico.—*A new Mexican.* A Mexican dressed in a new suit of the habiliments peculiar to his country.

New York.—*New fork*, (pitchfork.)

North Carolina.—*North Carol.* A party of serenaders may be seen, upon a bleak northern night, singing as best they may, a northern carol. Snow and ice are on the ground, and the singers shiver severely, although heavily wrapped.

Ohio.—*O-wire.* Wire is wound in round hoop-like bundles, somewhat the shape of the letter O; and when so wound, may, for our present purpose, be termed O-wire.

Oregon.—*Organ.*

Pennsylvania.—*Pen.*

Rhode Island.—*Island*, conspicuously intersected by many roads.

South Carolina.—*South carol.* A party of gay serenaders may be seen, upon a sultry southern evening, singing a southern carol, and ever and anon wiping the streaming perspiration from their faces.

Tennessee.—*Tennis.*

Texas.—*Texas steer.*

Utah.—*Mormon elder.*

Vermont.—*Vermin*; such as rats, mice, polecats, etc.

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Virginia.— *Virgin.*

Washington Territory.— *Washington*, "the Father of his country."

West Virginia.—*Best Virginia tobacco.*

Wisconsin.— *Miss Disconsolate.*

Wyoming.—*Foaming glass.*

When a bare or unqualified idea, such as "Ark," is used as an analogy, or representative for a name, the unqualified idea in question will, of course, be associated in the usual way. When, however, an idea is qualified by an adjective, or otherwise modified or elaborated, as in the case of "Fishy bun," or "Best Virginia Tobacco," it is often advisable, in the first place, to associate, separately, the bare idea conveyed by the noun—as "bun" or "tobacco"—and *then* qualify the idea in the mind, by considering the descriptive or qualifying word or words—as "fishy" or "best Virginia." There are other cases of qualified ideas, however, in which the judgment of the learner will suggest that it is better to take up the noun and its qualifying word or words *together*, as representing one inseparable idea,—as in the cases "Quarries' owner," "Delft-ware," "Mormon elder."

It is well for the learner, before attempting to memorize the series of names of States and Territories, to go over each name separately, and give the analogy, or representative idea, from memory. The name of each state or territory, together with its homophonic analogy, intermediary, or representative idea, should be repeated *aloud* several times, in order that the sounds may be associated in the mind or hearing. The rehearsal, aloud, of the various names, and their respective representative ideas, should be continued

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till such time as the name of a state or territory readily recalls or suggests its analogy or representative idea: or *vice versa*. When, on the one hand, the pupil is able to give, without hesitation, the analogy or representative idea for each name of state or territory; and, when, upon the other hand, he is able to readily give the name of each state or territory, promiscuously, upon being furnished with the respective analogies or representative ideas, he may proceed to finally memorize the entire series of actual names of states and territories, by one careful reading. The actual names of states and territories will be recalled or suggested to the mind or memory by means of the memorized series of representative ideas. The whole exercise may be pleasantly accomplished in a very short time.

In Lesson I the fact was alluded to that the words of a language are but artificial devices, signs, or symbols, designed to represent objects, thoughts or ideas. Before the words of a language, however, can be made effective for their purpose of representing or recalling to the mind a variety of objects, thoughts or ideas, the "meanings" of the various words must become associated and familiarized in the mind and memory with the words themselves. The student of a foreign language, therefore, is met at the outset of his study of the new language by the necessity of commencing to acquire the foreign vocabulary. But the student may associate the meanings of the various foreign words with the printed foreign words themselves in such a manner as to render the mere printed words capable of representing or recalling to his own

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mind the proper meanings of each: and yet he may not be able to give *utterance* to the foreign words in such a way as to render them capable of representing, recalling or conveying to the minds of others the meanings thereof. While, by memorizing a printed vocabulary, in his own way, the printed foreign words may be made to convey to the mind of the student himself the meanings of the various words, it it is necessary that he shall be able to give *the proper pronunciation* to the foreign words, if he would utter the words in such a way as to make them convey the desired meanings to other persons using the same language. There is thus not only an association of *meaning* to be made with the printed foreign word, but an association of *sound*, also. Furthermore, accent, grammatical construction, idiom, and so forth, all enter in, to work together to enable the linguist to express or convey meaning, and shades of meaning. In the example which we are about to give, however, we will concern ourselves only with the memorization of the meanings of foreign words, as sounded. Of course, foreign vocabularies, in their entirety, cannot be memorized with the ease with which we have memorized columns of simple words, yet the principle of association may be applied to them much more methodically and beneficially than is usually done.

The instruction of the present lesson is not intended for persons versed in philology, who are able to compare various languages with each other and trace the derivations of words; but is intended for those who desire to acquire a foreign language, without entering into a study of the evolution of its vocabulary from the vocabularies of other languages. The same re-

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mark applies, also, to the method of remembering the arbitrary genders of foreign words, given in the next lesson.

In the following exercise in the memorization of the meanings of a series of foreign words, we will use the German language by way of illustration. And, in the first place, it may be remarked that a number of words in the German language bear such a resemblance—in spelling, or in sound, or in both—to the corresponding English words, that they are capable of being very easily memorized. No particular method of association of the German word with its English meaning is required to be adopted in such cases as the following, for instance:—ACCENT, accent; ACCEPT, acceptance; DAMM, dam; GARTEN, garden; GLAS, glass; GOLD, gold; HAND, hand; HAUS, house; KALENDER, calendar; LAMPE, lamp; SILBER, silver.

But the large majority of German words, with their English meanings, are by no means so easy of memorization as the above examples. A large proportion of the German vocabulary (as of other foreign vocabularies) is made up of words which do not, of themselves, afford the slightest indication or suggestion of their English meanings. The method employed by the average student in the memorization of such words and their respective meanings, is nothing more, usually, than mere continuous repetition. We would point out, however, that the principle of homophonic analogy, or the insertion of an intermediary idea, may be advantageously employed, in many instances, to afford a connecting link between the foreign word and its English meaning; so as to render it possible to effectually memorize quite a long series of foreign

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words and meanings in a very short time. Thought energy may be aptly compared to the electric current: and, like electricity, the direct course or current of thought may be frustrated by non-conductors, or transmitted by conductors. The insertion of an intermediary idea between the foreign word and its English meaning, is, as it were, the insertion of a conductor, along which the thought current may naturally travel, or flash, from the foreign word to its English meaning. Or, again, the intermediary idea is as the middle link connecting two other links, theretofore separated; the whole forming a chain of thought, consisting of three links, welded together by the principle of association. It is to be observed that the intermediary ideas or homophonic analogies given below have a "fore and aft" association: for, whereas the association with the foreign word, which the analogy represents, is an association of *sound*, the association with the meaning of the foreign word will very often, though not always, be an association by *visualization*—mental visualization.

As a brief exercise in memorizing a series of foreign words, and their respective meanings, by the insertion of homophonic analogies, or intermediary ideas, we subjoin the following: giving the German words (in English characters) first; then the homophonic analogy; and finally, the meaning of the German word.

AAL (awl) eel.
ADER (adder) vein, artery.
ADLER (battler) eagle.
AFFE (taffy) ape.
ALAUN (a gown) alum.
ALTAN (sultan) balcony.
AMBOSZ (bossed anvil.
AMSEL (damsel) blackbird.
ANANAS (bananas) pine-apple.
ANGER (languor) pasture.
ANGRIFF (angry) attack.
ANPUTZ (bandbox) dress, finery.
ANRUF (on roof) summons.
ARZENEI (arsenic) medicine.
ASCH (ashes) pan, pot
BAKEL (cackle) stick.
BARETT (barehead) bonnet, cap.
BAUER (bower) cage.
BOOT (boat) boat.
BORN (horn) water, spring.

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It has been already observed that some foreign words, by reason of their spelling, or of their sound, or by reason of both their spelling and sound, readily suggest, or recall to the memory, their somewhat identical English meanings. The above series of words, however, (with one exception) not of themselves affording the memory the slightest clue to, or suggestion of, their meanings in English, homophonic analogies, (or homophonic intermediaries) have been introduced, for the purpose of guiding the mind from the word to its meaning. As has been already pointed out, if we would apply the principle of association of ideas we must have ideas to associate. A foreign word which conveys or suggests no meaning to our mind does not represent to us what may be termed a tangible idea; and we cannot readily associate a tangible or definite idea (such as Telescope or Castle) with that which is not, or which does not convey, a tangible or definite idea. While we may readily associate the idea Telescope, for instance, with another definite idea, such as Umbrella; or the idea Castle with another definite idea, such as Lighthouse; we cannot readily associate Telescope with Zefjykl, or Castle with Gnlptmo. By continuous repetition, indeed, an association may be gradually formed between non-suggestive foreign words and their familiar English equivalents; but the association so formed is an association of a distinctive idea with a mere subtlety of sound, or a mere fantasy of form or arrangement of symbol; an association of that which is definite and tangible with that which, to the learner at least, is arbitrary, indefinite, ethereal, ungraspable.

When—as, for instance, in the German words

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ADMIRAL, *admiral*, or GARTEN, *garden*— the spelling of an entire foreign word is identical with, or bears a strong resemblance to, the spelling of its "meaning," the memorization of word and meaning is a very easy matter. Failing, however, to find the spelling of the entire foreign word identical, or nearly so, with the spelling of its meaning, we often find an identity of the spelling of the first syllable of the foreign word with the spelling of the first syllable of its meaning. There is one such word in the foregoing series—ALAUN, *alum*. Now, the giving of the mere first syllable of a word which it is desired to call up in the memory is often sufficient to effectually prompt the memory, or afford it a clue to the recollection of the entire word. When, therefore, the first syllable of a foreign word is identical with the first syllable of its meaning, the person memorizing a foreign vocabulary should extract such aid as he can from the circumstance. But, when the first syllable of a foreign word conveying no tangible idea to the mind bears no resemblance to the first syllable of its meaning, the first syllable of the foreign word in question may often be adopted, with advantage, as a basis for obtaining an intermediary idea, or connecting link, to be used in place of a homophonic analogy. In the foregoing series, for instance, we find the word AFFE; a word which represents or conveys no distinctive idea to a mind not acquainted with German; and a word, therefore, which is incapable of being readily associated with a definite idea.

We used the word *taffy* as a homophonic analogy, or homophonic intermediary, to represent the original German word and form a bond of association between the original word and its actual meaning. Using the

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first syllable of the foreign word as a basis, however, and turning to the dictionary, we find a number of words which represent definite ideas to the English mind, and either of which may be taken as an intermediary for the original word, in place of the homophonic analogy "taffy," which has been used. To distinguish a homophonic intermediary, analogy, or connecting link, from such intermediaries as are given below we will call the one a Homophonic Intermediary and the other an Initial Intermediary. To represent the word AFFE, then, we find, by turning to the dictionary, a variety of words suitable for use as Initial Intermediaries—there are the words Affable, Affected, Affectionate, Affidavit, etc. Either of those ideas may be readily associated, both with the original German word "Affe," and its English meaning "Ape." Or, again, taking the word AMBOSZ, which occurs in the foregoing series, we find Initial Intermediaries as follows—Ambassador, Amber, Ambition, Ambrosia, etc., all of which represent to the English mind definite and distinctive ideas, and either of which may be readily associated with the German word "Ambosz" and with its English meaning, "Anvil."

Of course, the individual judgment of the person engaged in memorizing a foreign vocabulary must be relied upon to dictate to him the instances in which he should employ intermediary ideas, and the instances in which he should seek to memorize the words and their meanings in the usual way, that is, by mere repetition. The introduction of an intermediary link between the foreign word and its meaning is intended as an *aid* to the memory, and, of

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course, in cases where resort to the principle would, practically, be no aid at all, it is not intended to be resorted to. When a series of foreign words and their meanings can be memorized more easily and effectually by the force of mere repetition than by the introduction of the principle of Intermediary Ideas, it would be foolish to introduce the principle. Let the learner, then, use the principle where advantageous, and refrain from using it where of no practical benefit.

Some may fear that, where the principle of Intermediary Ideas is introduced in the memorization of a series of words, there might be some danger that the pupil will afterwards mistake the Intermediary Idea for the actual meaning of the foreign word. It is, however, a more satisfactory course to put the matter to a practical test than to sit and theorize about it, however learnedly. If the associations be properly made, the careful pupil will soon find from experience that, in afterwards recalling the meaning of the words to memory, there is no real danger of mistaking the intermediary ideas for the actual meanings of the words. In any case, however, the intermediary ideas are not intended as permanent fixtures. Although a child, in the beginning of its scholastic career, has to laboriously spell out, piecemeal, the simplest words, its mental powers become gradually quickened; and, before long, it can recognize and name the words at a glance, without going through the preliminary process of spelling them out piecemeal. In like manner, as regards intermediary ideas, introduced in the memorization of foreign vocabularies, it is intended that, in each instance where

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used, the intermediary idea shall gradually drop into disuse as the mind becomes familiarized with the direct association of the foreign word and its English meaning.

Where a foreign vocabulary is memorized by mere repetition, the student will often notice that, although he can translate a passage of the foreign language into his own language, he cannot so readily translate a passage of his own language into the foreign language. He will find that, frequently, he can remember the meanings of the various foreign words, when he cannot call up the necessary foreign words if the equivalent words in his own language be given him. The cause of this is found in the fact that he has memorized the vocabulary in one particular order. He has memorized the foreign word, then its English meaning; but has never reversed the process, and taken up the English word first, and then followed with its foreign representative. By applying the principles of association, as explained in the present work, to the memorization of a foreign vocabulary, the disadvantage in question will be obviated to a considerable degree; for we have already seen that chains of thought, associated in the manner which we have explained, may be recalled to mind *either forwards or backwards.*

In concluding the present lesson, we have to remark that, although by means of Lesson I the student could only associate a chain of mental pictures or images, he should now be able to associate various kinds of ideas not capable of being represented in the mind by distinct images or pictures. As an exercise in various applications of association, we now give a

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confused series of words, embracing nouns, verbs, adjectives, proper names, technical and scientific terms, etc. Let the learner associate the series with the Fixed Ideas of the Table; but as, in former exercises, he has already used the first fifty Fixed Ideas considerably; it may be well, in the present exercise, for him to commence with Fixed Idea No. 51. Let him associate the first word of the following series with Fixed Idea No. 51, the second word with Fixed Idea No. 52, and so on.

greenish	cellulose	Radcliff
kill	protoplasm	ethmoid
turtle	metaplasm	hyoid
malar	chicken	sullen
very	Fraser	change
cactus	extreme	elaborate.

Lesson IX.—Association applied to the remembrance of Genders in Foreign Languages.

The mastery of the genders in the English language presents no difficulty whatever to the learner. In other languages, however, it is different. In the matter of the remembrance of genders, the German language, for instance, presents to the foreigner, seeking to acquire that tongue, very great difficulty indeed. A large number of the genders in German, and in

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other languages, being purely arbitrary, are exceedingly difficult of remembrance. There are, sometimes, rules by which the genders may be determined to a certain extent; but, nevertheless, a great many genders have to be remembered individually, by sheer memorization. Resorting, as in the previous lesson, to the German language for our illustrations, we would observe that students in memorizing the German vocabulary, often commit to memory the Definite Article in association with the noun, in order to be able, afterwards, to remember the genders of the various nouns. For example: FELS, m, rock, is memorized as *der Fels*; BLUME, f, flower, is memorized as *die Blume*; PAPIER, n, paper, is memorized as *das Papier*. This memorization of the definite article in connection with the noun is an association by sound, or a memorization by rote, just as much as the memorizing of the noun in connection with the name of the gender itself—"masculine," "feminine" or "neuter." In either case, the gender is impressed upon the memory by mere mechanical repetition. For those who are somewhat advanced in the study of the language, the association which has been gradually formed in the mind between the various nouns and their respective definite articles is, of course, of great value in enabling those advanced persons to determine the genders from memory. With beginners, however, it is almost, if not altogether, as easy to remember the name of the gender itself in association with each noun, as to remember the definite article in association therewith.

An idea such as that conveyed by the word Rock, or Flower, or Paper, is quite tangible and distinct to

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our minds, but the idea conveyed by "masculine," or "feminine," or "neuter"—especially when applied arbitrarily—is of an intangible, subtle, ethereal character. To directly associate the idea "masculine" or "feminine," or "neuter," therefore, with a tangible and distinct idea is a difficult matter; and is to be effectually accomplished only by continuous repetition. The present author, wondering whether the principle of association could not be applied to arbitrary foreign genders, in such a manner as to render the memorization of the same a more easy, speedy and effective task, pondered over the matter for a considerable time, till, one day, he suddenly hit upon the simple plan which is explained in the present lesson. It will be found that the plan adopted is simply an adaptation of a principle which has been already made use of, in the previous lesson; namely, the substitution of a tangible idea for an intangible idea, or the representation of an intangible idea by a tangible idea, capable of being definitely and distinctly pictured in the mind's eye. The idea conveyed by the word *Moon*, for instance, is quite clear and distinctive; and, being so, it stands out in sharp contrast to the idea represented by the word *Masculine*. Again, for instance, the idea conveyed by the word *Feathers* (pile of feathers) is quite clear and distinctive to the mind; and, being so, it stands out in sharp contrast to the idea represented by the word *Feminine*. Once more, the idea conveyed by the word *Net*, for example, is quite clear and distinctive; and, being so, it stands out in sharp contrast to the idea represented by the word *Neuter*.

Now, if words representing striking and distinctive

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ideas be substituted for the words "masculine," "feminine" and "neuter," the substituted words or ideas may be very readily associated with the ideas represented by the foreign words, that is, with the "meanings" of the foreign words. And if these substituted words bear *the same initial letters* as the names of the genders, the substituted words will very readily indicate the genders of the foreign words. To represent, by way of example, the genders in the German language, the ideas already suggested may be employed, thus:

Masculine	**Feminine**	**Neuter**
Moon	*Feathers*	*Net*

Of course, if the "common" gender be required to be indicated, at any time, a distinctive idea, commencing with the initial letter *C*, will be taken as a substitute for the name Common. The idea Common, itself, representing, not the common gender, but an open piece of ground, will do very well; or any other suitable word may be taken—such as Camel or Canoe.

At this point, we would refer to a mental principle which has not yet been particularly alluded to in the present work. We may call it the principle of Recognition of past impressions, or the Identification of Ideas. It will be noticed that, oftentimes, an idea, or item of knowledge, is stored away in the archives of the mind; and, while the person in whose mind the idea, or item in question is lodged has not the spontaneous power to deliberately recollect or produce it, when called for; he has the power, nevertheless, to

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recognize or identify it, upon its being passed in review before his mind, among a number of other ideas. While he has not the power to strike the chord in his memory which he wishes to strike, he can readily recognize and identify the particular chord when struck. Sometimes, it is necessary to individualize a criminal; and, while a person who saw the criminal in question commit the act of criminality may be utterly unable to distinctively describe the criminal's general appearance to the police, with the lineaments of his countenance, and so forth, he may be perfectly able to unerringly single him out from among a number of other prisoners, drawn up in line in the court-yard of the jail. And it is sometimes so with ideas. An idea may be effectively lodged in the mind, and, while we may not have the power to deliberately recollect the idea, we find we have the power to recognize or identify it, if passed in heterogeneous review before our mind, among a number of other ideas.

The principle of recognition or identification of ideas may be brought into play in the following exercise; which is particularly intended as an exercise in remembering, by one reading, a series of arbitrary genders in the German language. The three ideas already given—namely, *Moon*, *Feathers*, *Net*—will be taken to represent Masculine, Feminine and Neuter respectively: and, if the various associations be properly made, the learner will be able to tell from memory, in each case, just which idea of the three was associated with the idea, or meaning, represented by the German word. Knowing that only three ideas have been used; and knowing just what these

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three ideas were; even if the learner be unable, after memorization, to call up the associated genders at will, he will be able, in each case, to readily recognize or identify the idea representing the gender—the idea which has been associated with the meaning of each German word. In the following exercise in memorizing the meanings of a series of German words, and their genders, we have used Initial Intermediaries exclusively, as a link between the word and the meaning; and have not introduced any mere Homophonic Intermediaries, as we did in the previous lesson. The intermediary ideas are printed within brackets, as in the former exercise. It will be seen that, in the present exercise, we have *three* acts of association to perform in each case; instead of *two*, as in the exercise given in the previous lesson. In the present exercise we have, firstly, the association of the intermediary idea with the German word; secondly, the association of the meaning of the German word with the intermediary idea; and, thirdly, the association of the idea representing the gender with the meaning of the German word. Whereas, then, in the series of German words given in the previous lesson, we had, in each case, a chain of ideas consisting of *three* links, in the present exercise we have, in each case, a chain of ideas consisting of *four* links. In afterwards recalling to mind the associations representing genders—the associations which have been made with the various words of the series—the initial letter of "Moon" or "Feathers" or "Net," will indicate the respective genders of the various words.

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BETTLER (bettor) beggar—**m.**
BILD [billhook] picture—**n.**
CLAVIER [claw] piano—**n.**
DORF [dory] village—**n.**
ENTE [enterprising] duck—**f.**
FELS [felspar] rock—**m.**
FENSTER [fencer] window—**n.**
GLOCKE [globe] bell—**f.**
HAGEL [hag] hail—**m.**
IRRSTERN [irradiancy] comet—**m.**
KETTE (kettle) chain—**f.**
KITT [kitten] cement—**m.**
MATZ [mats] simpleton—**m.**
MAUER [mausoleum] wall—**f.**
PANTOFFEL [panther] slipper—**m.**
REGEL [regulation] rule—**f.**
RITTER [rite] knight—**m.**
SAMMET [sampler] velvet—**m.**
TAFEL [taffeta] slate—**f.**
TROMMEL [trombone] drum—**f.**

In the foregoing exercise, we have associated a distinctive idea representing the gender, not with the German word itself, but with the idea represented by the German word, that is, with its meaning. It happens sometimes, however, that there are different German words which express the same idea; and that the genders of these words expressing the same idea are not the same, but are diverse from each other. The word BOOT, for instance, represents the idea Boat, and is of the neuter gender: but the word KAHN, while also representing the idea Boat, is of the masculine gender. In such cases, when they actually arise in the study of the language, the learner should distinguish the genders in his memory by prefixing the definite article as before alluded to.

In any case, however, the plan of using substituted ideas to represent the genders, as explained in the present lesson, is intended for those *beginning* the study of a language. As the learner gradually becomes familiar with the German language, for instance, and is able to remember the definite article used in connection with the various nouns, the article itself will be sufficient to indicate the genders to his memory. It is sometime, however, before the

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learner reaches such a degree of acquaintance with the language; and, till he does so, the application of association explained in the present lesson may be advantageously employed.

But, frequently, persons are engaged in the study of more than one foreign language, at the same time. One set of ideas, representing the genders, should be used *exclusively* in one language; and an entirely separate and distinct set in each of the other languages which are being studied, thus:

	Masculine	**Feminine**	**Neuter**
GERMAN.—	*Moon*	*Feathers*	*Net*
FRENCH.—	*Mule*	*Forest*	*Needles*

It frequently happens that, in one language, a word representing a certain object or idea is of a certain gender, while, in another language, a word representing the same object or idea is of a different gender altogether. By using separate and distinct sets of Gender Substitutes in each language, however, confusion in the memorization of the conflicting genders may be entirely obviated.

Lesson X.— The remembrance of Numbers.

As regards words representing objects, it may be remarked that the size of the word is no index what-

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ever to the size of the object which it represents; for while, sometimes, a small object is represented by a large word, a large object is sometimes represented by a very small word indeed. The word ANIMALCULE, for example, represents an animal so very minute as to be invisible to the human eye without the aid of the microscope; while, upon the other hand, the word Ox represents one of the largest of animals. With numbers, however, the case is different: and the more figures which succeed the units in any group of figures—that is, in any number—the greater is the numerical idea sought to be conveyed or represented to the mind. In preceding lessons, in the memorizing of series of words, the mere size of the word representing an idea was a factor of but little practical consequence in the matter. In remembering numbers, however, either in the ordinary way, or by the means to be used in the present lesson, the shorter the number (as a rule) the more readily may it be remembered; and, the longer the number, the less readily may it be impressed upon the mind. The number 24, for instance, is more readily remembered than the number 735,489. In the present lesson, we will again apply the principle of substituting clear and distinct ideas for abstruse and obscure ideas; and give exercises in remembering numbers by means of words which embrace the syllables of the Key of Consonants.

Below is given a series of numbers which is intended to be memorized by one careful reading. Words are to be taken to represent the numbers, just in the same manner that the words of the Table of Fixed Ideas were shown to represent certain definite

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numbers. The Phonetic Appendix or Vocabulary, which follows the Lessons in the present work, affords a large stock of words from which to select suitable equivalents for numbers. Where the same number occurs more than once in the same series of numbers desired to be memorized in a continuous chain, the repeated number should, on each occasion on which it arises, be represented by a distinctly different idea. If the number 51, for example, occurs twice in the same series, the idea *lady* may be taken as its representative, or equivalent, in the first instance; and, say, the idea *lathe* in the second instance. When a word to express or represent a certain whole number is not given in the Phonetic Appendix, other words must be taken for the component figures of the number in question. For example, there being no word for 242, words may be taken for 2 and 42, or 24 and 2. Any number, no matter of how many figures it may consist, may be represented by simply using enough words. By a little consideration, however, on the part of the pupil, words to represent certain given numbers may, very often, be readily called before the mind without the necessity of consulting the Phonetic Appendix. If, for instance, the number 352 be given, the pupil, knowing that, according to the Key of Consonants, a word, in order to represent that number, must contain the consonants m—l—n, may try the insertion of vowels between these consonants, and so call up the word *melon*. But, in order that the learner may be assisted in the present exercise, to the series of numbers given below, we subjoin a series of words to represent them.

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304	11	210	177
84	107	4	202
743	324	197	732
312	539	914	994
91	14	951	401
416	39	724	285
958	414	545	947
641	782	431	795
742	179	57	74
181	540	30	492

miser	statue	handsaw	tank
fairy	desk	arrow	ensign
cream	miner	tobacco	hangman
mutton	lamp	butter	pepper
boot	oyster	belt	roast
radish	mop	canary	anvil
bailiff	oratorio	laurel	pork
shirt	coffin	hermit	cable
acorn	teacup	silk	auger
devotee	walrus	mouse	ribbon

In order that the foregoing series of random numbers may be committed to memory, by one reading, it is intended that, as already intimated, the learner shall memorize, by association, the series of words (ideas) representing the numbers. In repeating the series of numbers, from memory, of course the learner will call to mind, one by one, the representative ideas which he has taken as equivalents for the numbers: and, mentally changing the words into numbers, on the basis of the Key of Consonants, give utterance only to the resultant numbers. The words (or ideas)

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which represent the numbers may be associated with each other, in a continuous chain (as was done in the first lesson) or they may be associated, one by one, with the Table of Fixed Ideas, given in Lesson V. If the learner associates the series of ideas with the Table of Fixed Ideas, he will be able, not only to repeat the series of numbers from memory, in consecutive order, forwards and backwards; but to give the numbers, one by one, as called for promiscuously; that is to say, he will be able to give the thirty-second number, or the eleventh, or the twenty-eighth, or any other.

Fortified with ideas to represent a few auxiliary numbers, however, the Table of Fixed Ideas, given in Lesson V, may be utilized, by the person familiar with the said Table, for the purpose of readily furnishing series of simple numbers, without recourse being had to the Phonetic Appendix. To express simple numbers, then, we may use the Fixed Ideas of the Table; with an auxiliary list of ten adjectives, representing numbers 1 to 10, inclusive; and words to express the single cipher, double cipher, treble cipher, etc—0, 00, 000.

The ten adjectives may be as follows:

1. *Sweet*	4. *Sour*	7. *Sick*	10. *Hideous.*
2. *Snowy*	5. *Well*	8. *Heavy*	
3. *Seamy*	6. *Huge*	9. *Happy*	

A number ending with a single cipher—0—may be often expressed by pluralizing words, thus, *pipe* 99, *pipes* 990. But it is well to also have a separate word to represent 0. We may take the word *Egg*, which represents an object the oval outline of which resem-

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bles 0. For the double cipher—00—we may use *Spectacles*, which have two oval eyes, somewhat resembling 00. For the treble cipher—000—we may adopt the idea *Pawnbroker*, suggestive of three balls, resembling 000.

In representing a number by means of a word drawn from the Table of Fixed Ideas, in conjunction with an adjective, let the adjective be put *after* the noun, and not before it. If, for example, it be desired to represent the number 182, by means of a noun from the Table of Fixed Ideas, in conjunction with one of the series of ten Adjectives given above, the eighteenth Fixed Idea, *Dove*, will be taken; and then qualified by the addition of the adjective *snowy*, making *Dove snowy*, that is, 182. The adjective is placed after the noun in order that, in the first place, the idea represented by the noun may be directly associated with the preceding and succeeding ideas of the series; and then qualified, by affixing the particular adjective necessary to make the qualified idea represent the whole number wanted. As has been already remarked, in the preceding lesson, there is a principle by which, while a person may not be able to deliberately call up a certain idea, or item of knowledge, from the archives of the mind; he may, nevertheless, readily *recognize* and single out the particular idea or item in question when it is passed in review before the mind, among a number of other ideas or items of knowledge. When, therefore, a noun, representing a number, is qualified by an adjective, a person, in recalling the nouns and their respective adjectives to memory, will be able readily to recognize whether the adjective used in any par-

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ticular case was *Sweet* or *Sour*, *Sick* or *Well*, *Happy* or *Hideous*, *Huge* or *Heavy*, *Snowy* or *Seamy*.

In regard to the Table of Fixed Ideas, which was given in Lesson V, we may observe, in the present connection, that, with that series of Fixed Ideas, may be associated, for permanent purposes, quite a number of diverse matters; without the person so using the Table getting the different matters confused in his mind, or mixed up in his memory. To anyone who has not had actual experience in putting the Table of Fixed Ideas into practical use, by associating with it sundry diverse matters, it might seem that two or more distinct trains of thought, attached to the same series of Fixed Ideas, would become mixed up in the mind and memory. Actual experience, however, will demonstrate that such is not the case, by any means. In such things, it is always well to lay the theorizing tendency to one side, and subject the matter to the test of actual experience.

The story is told that, once upon a time, a certain potentate, sly and jocular, gravely propounded to the philosophers and wise men of his court the question,—How do you account for the fact that if a vessel be filled with water to the very brim, so that even another drop cannot be added, a number of live fish, put into the already filled vessel, will not spill the water? Some of the philosophers, after much pondering, handed in very learned answers to the king's question, accounting, in various scientific ways, for the fact which appeared to so puzzle his majesty. The wise men, too, explained the phenomenon very ingeniously, and showed plainly that, indeed, it could not possibly be otherwise when

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live fish were put into a vessel already filled with water to the brim. One philosopher, however, more practical than his fellows, concluded to privately put the matter to a test. Filling a vessel with water, he added some living fish; and found that, in reality, the water *did* spill. And so, much to the chagrin of the other philosophers, he was able to say to the king that, having practically tested the matter, he had found that the alleged fact upon which his majesty's question had been based was not a fact at all.

To those who, never having actually tested the matter, would affirm, theoretically, that sundry trains of thought cannot be associated with one and the same series of Fixed Ideas without confusion, we would simply remark that their theory is open to the same objection as the king's fish story. It is not founded upon fact. The fact that the theory in question is not a fact will appear even to the beginner; although doubtless it will be demonstrated more strongly to a person after he has had some practice in using the Table of Fixed Ideas. If we had to take a new series of Fixed Ideas for every new matter which we wished to establish in the memory, it would be easier to fix matters directly in the mind as they arose; for, otherwise, we would be remembering *two* chains of ideas in order to remember only *one* of them! That, of course, would be impracticable and absurd.

It is quite practicable, however—as actual experience will demonstrate—to permanently attach, to one and the same series of Fixed Ideas, several matters or trains of ideas, utterly diverse from each

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other; so as, afterwards, to effectually recall any one of the associated matters, or trains of thought, to mind. "The Cataract of Lodore;" the names of the sixty-six books of the Bible; a long series of arbitrary numbers; and a lengthy piece of poetical composition, entirely different from "The Cataract of Lodore;" have all been associated, at the same time, in the mind of the present author, with the same series of Fixed Ideas, without the slightest confusion, or tendency to confusion. Although endowed by nature with but an ordinary memory in some directions, and a poor memory in other directions, the present author has found, by actual experience, that when, for instance, he wished to call to memory, by means of the Table of Fixed Ideas, the train of ideas contained in the various lines of the Cataract of Lodore, he had no tendency whatever to call up anything else—such as the books of the Bible—which he had associated with the same series of Fixed Ideas.

But although it is strictly true what has been said as to the utility of one and the same series of Fixed Ideas, as a means of effectually recalling to mind several diverse chains of ideas, or trains of thought; we now give a new and separate series of fixed ideas called the Auxiliary Table of Fixed Ideas. By those who have already mastered the first Table, this Auxiliary Table will be found useful, in a great many ways. In the brief exercise in numbers, yet to be given, we will use the Auxiliary Table of Fixed Ideas as a basis upon which to proceed in remembering numbers by means of the nouns of the first Table, in conjunction with the ten adjectives, and the words representing ciphers, which have been already given in the present lesson.

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Auxiliary Table of Fixed Ideas.

1. Soot
2. Snow
3. Siam
4. Sewer
5. Sleigh
6. Shoe
7. Sack
8. Sieve
9. Soap
10. Thistle
11. Statuary
12. Tannery
13. Oatmeal
14. Drum
15. Atlas
16. Dishes
17. Thicket
18. Diver
19. Stable
20. Nest
21. Sundial
22. Nunnery
23. Cinnamon
24. Sunrise
25. Nails
26. Engine
27. Niagara
28. Anvil
29. Nabob
30. Mosque
31. Medal
32. Maniac
33. Mummer
34. Marsh
35. Melon
36. Major
37. Mahogany
38. Mavis
39. May-pole
40. Rosin
41. Rudder
42. Orange
43. Hermit
44. Harriers
45. Roller
46. Archer
47. Circus
48. Raft
49. Arbour
50. Last
51. Leather
52. Linen
53. Helmet
54. Walrus
55. Lilac
56. Leeches
57. Alcohol
58. Loft
59. Alps
60. Chisel
61. Watch-tower
62. Giant
63. Chimney
64. Churn
65. Shield
66. Jujubes
67. Sugar
68. Shovel
69. Chapel
70. Cask
71. Guitar
72. Kennel
73. Camel
74. Crown
75. Coals
76. Auction
77. Coquette
78. Coffin
79. Cupola
80. Fossil
81. Phaeton
82. Fount
83. Famine
84. Ford
85. Violin
86. Fishwife
87. Vicar
88. Fifer
89. Halfpenny
90. Bust
91. Battery
92. Bones
93. Bamboo

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94. Press
95. Bellows
96. Butcher
97. Bakehouse
98. Beaver
99. Baboon
100. Diseases.

The foregoing Auxiliary Table may be very easily and quickly memorized by means of the Table of Fixed Ideas given in Lesson V. After one careful reading it may be correctly repeated; forwards, backwards and promiscuously. This Auxiliary Table has been so arranged that there will be no danger of getting its series of words mixed up with the series given in the former Table. The first nine words of the present series may be readily distinguished in the memory from the first nine words of the former series, by the fact that each of these nine words in the present series bear the initial letter *S*. The remaining ninety-one words may be readily distinguished in the memory from the words of the former series, by the fact that these words in the present series, unlike the corresponding words of the former series, exceed in numerical significance the numbers for which they stand. The word *Raft*, for instance, is taken to represent 48, although, in reality, the numerical equivalents embraced in the word represent a larger number.

Take the following, as an exercise in the memorization of a series of numbers by the means already explained.

1. Soot 98	6. Shoe 8	11. Statuary 900
2. Snow 407	7. Sack 3,310	12. Tannery 2
3. Siam 1,600	8. Sieve 195	13. Oatmeal 10,099
4. Sewer 182	9. Soap 8,426	14. Drum 1,000
5. Sleigh 179	10. Thistle 9,000	15. Atlas 86.

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The numerical equivalents for the respective numbers of the foregoing series are as follows:

1. Beef.
2. Horse—sick.
3. Ditch—Spectacles.
4. Dove—snowy.
5. Dog—happy.
6. Ivy.
7. Mummy—hideous.
8. Tub—well.
9. Fur—Niche.
10. Abbey—Pawnbroker.
11. Piazza—Egg.
12. Honey.
13. Diocese—Pipe.
14. Woods—Spectacles.
15. Fish.

Lesson XI.—The remembrance of Historical Dates, Latitudes and Longitudes, Heights of Mountains, Lengths of Rivers, etc., etc.

Figures or numerals are but arbitrary symbols, characters or devices, designed to represent ideas of time, number, quantity, distance, degree, etc.; and, whereas one nation or people has represented such ideas by one set of symbols, other peoples have attained the same end by the employment of an altogether different series of symbols. For example, the idea of time represented to us by the Arabic symbols 1328 may be represented as effectively by means of the Roman numerals MCCCXXVIII. Figures or numerals, then, being purely arbitrary and artificial symbols, characters, signs, or devices, designed to represent or convey to the mind ideas of time, number, quantity, distance, degree, etc.; and, moreover, these figures or symbols being, to most persons, exceedingly difficult of distinctive remembrance in connection with facts in history, geography, statistics, etc., it is not unphilosophical, in the present lesson, to represent numerical ideas by other symbols than mere figures

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or letters; if, by doing so, we not only do not obscure the numerical ideas, but are assisted to *remember* these ideas very much better, as they occur (like dates of events) in connection with a diversity of facts. To remember numbers, dates, etc., by means of words conveying distinctive ideas to the mind, is, of course, an artificial expedient; yet it is no more artificial than to endeavor to recall ideas of time, number, quantity, etc., to the memory by means of the figures or symbols in common use. Both expedients are artificial and arbitrary; and the choice is a practical one between that which is most effective and that which is not at all effective, with the great majority of persons. The author's own personal experience has demonstrated to him that, while he was unable in the usual way to remember, without confusion, even a dozen dates, he is perfectly able, by the means employed in the present lesson, to remember hundreds of dates correctly—and thousands if necessary—without any strain whatever upon the mind. He has not found that the judicious association of words or ideas with events, etc., as a means of enabling him to remember dates, and so forth, has injured his mental machinery in other directions, by any means. Upon the contrary the effect has been, and is, of a healthy and helpful character; conducing to greater thoughtfulness, and the sharpening of the mental faculties. It is true that artificial memory, carried too far, is to be deprecated; but artificial memory or, rather, artificial helps to the natural memory, employed *judiciously*, are essentially philosophical. Although many master minds have appreciated the advantage, and the philosophy, of just such a thing as the utilization of language as a means

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of representing and remembering numbers, dates, and so forth, some persons have posed as philosophers, and sweepingly condemned the principle without any discrimination whatever. The "philosophy" of such theorists and doctrinaires, however, being superficial and not fundamental, is not philosophy at all, but a counterfeit thereof. It is amusing to see such pedants turn from discoursing learnedly upon matters such as the Signs of the Zodiac, and many other arbitrary things connected with astronomy and the arts and sciences, to snuff indiscriminately at Mnemonics.

Persons so happily endowed by nature as to be able to easily and effectively remember a great mass of historical dates, heights of mountains, lengths of rivers, statistics, etc, do well to employ their talent naturally, without the aid of any artificial help. Others, however, not endowed with the power of readily remembering abstract and confusing matter such as dates, heights of mountains, lengths of rivers, etc., and seeing no practical prospect of developing such a power from any latent faculty they may possess, may philosophically employ the expedients set forth in the present lesson.

In representing dates, and so forth, by means of words, the consonants of which represent the numbers, we will show, in the first place, how the words representing dates may be made up into set phrases, capable of being committed to memory by repetition; and, in the second place, how the words representing the dates, without being made up into such phrases, may be readily impressed upon the mind by mental visualization, or by other method of association.

Firstly, then, as to memorizing dates by means

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of words made up into set phrases. By inconsiderate persons who have never really examined into the subject nor put the matter to an actual test; but who, nevertheless, have felt themselves free to express their opinions with considerable dogmatism, it has been sometimes remarked to the present writer that it is harder for anyone, or, at least, as hard, to remember the words representing the dates as to remember the dates themselves. Now, it must be admitted that this objection is a very serious one indeed; nay, it must be admitted that the objection is absolutely fatal to the claim that the plan of using words instead of figures is a philosophical plan,—if there happens to be any truth in the objection. There is, however, not a particle of truth in it; and therefore, it may be passed by without further notice. There are, perhaps, persons gifted by nature in such a way as to be able to readily remember great masses of historical dates, statistics, and so forth, without any appreciable effort: but the present lesson is not designed for such persons. Upon the contrary, the present lesson is designed for those who find it difficult, if not utterly impossible, to effectively remember and retain such matter. There are many persons with slow or "poor" natural memories, who, by dint of diligent repetition, can remember long pieces of prose or verse; while utterly unable to remember correctly, by any amount of repetition, long series of historical dates, lengths of rivers, heights of mountains, statistics, etc. One object of the present lesson is to show such persons how the faculty which they now employ, satisfactorily enough, in the remembrance of prose and poetry, etc., may be turned in

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the direction of historical dates, etc., and be made to yield surprising results in the memorization of classes of matter the memorization of which, heretofore, has been to them practically impossible.

In the following examples, the dates, etc., are remembered by means of a phrase or formula, containing words which, according to the Key of Consonants, express or represent the figures. These phrases or formulas are intended to be memorized in connection with the historical event, or other fact, the particulars of which are desired to be remembered. As will be seen by a reference to the following examples, the final words of the formula, which are printed in small capitals, express the figures. These formulas, which are printed in italics and small capitals, should be memorized *aloud*, in connection with the historical events or other facts to which they respectively refer; and the learner should habituate himself to *emphasize*, in each case, the words which stand for the numbers. By doing so, and by knowing that the words representing the numbers are always put at or towards the end of the formulas; the learner, in afterwards recalling the dates, etc., to memory, will have no difficulty in determining just what words of the various formulas stand for the figures. Suitable words to represent dates, etc., may be obtained from the Phonetic Vocabulary.

1492. Columbus discovered the Bahama Islands: *which were overgrown with* DRY PINE.

1859. The hanging of John Brown: *was done with a* TOUGH LOOP.

Acre, Syria. Latitude 32; Longitude 35. *To work an acre requires a* MAN *and a* MULE.

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Buffalo, U. S. Latitude 42; Longitude 78. *A Buffalo was accompanied by a* SERENE CALF.

Mont Blanc, 15,781 feet high, *is ascended with* TOILING FEET.

River Danube, 1,725 miles long: *flows more swiftly than a* WIDE CANAL.

In the memorization of exact dates—Year, Month and Day—we may express the month by means of any suitable noun beginning with the initial letter of the name of the month; making an exception, however, in the cases of May, June, July and August; the initials of which are the same as the initials of March, January and April. Supplying arbitrary initials to represent May, June, July and August, the nouns to represent the twelve months may begin with the following initials.

J—Jannary	**R**—May	**S**—September
F—February	**T**—June	**O**—October
M—March	**L**—July	**N**—November
A—April	**G**—August	**D**—December.

A few examples of dates, with year, month and day indicated in the formula, are now given. It will be noticed that, in each case, such nouns have been selected to represent the months as are so great numerically as not to be liable to be confused in the mind with the words representing the year. It will also be noticed that, for the same reason, the word representing the month cannot possibly be confounded in the mind with the word representing the day of the month. No word capable of being rendered into less than *three* figures should be taken to represent the month, lest it become confounded in the memory

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with the word representing the *day of the month:* indeed it is always well, in selecting words to represent the months, to select such words as, if rendered into numbers, would yield more than *four* figures; and, consequently, could not be mistaken in the memory, either for the year, or for the day of the month. At least, in dates of events which happened before the Christian Era, words representing months should, as a general rule, be such as, if rendered into figures, would yield a number exceeding 4,004—the number of years said to have constituted the pre-Christian era. Upon the other hand, as regards dates in the Christian Era, the words representing months should, as a general rule, be such as, if rendered into figures, would yield a higher number than the number of years of the present era which have already run their course.

15th November, 1805. The first exploring expedition across the American Continent reached the shores of the Pacific Ocean: *having kept a* DAILY NOTEBOOK *and found a* WEIGHTY FOSSIL.

17th April, 1521. The Diet of Worms. *A diet of worms might taste like* SOOTHING AMBROSIA *to an* IDLE ANT.

Many persons, who find it practically impossible to remember dates and figures in the usual way, can easily, and *pleasurably*, memorize formulas such as we have used; seeing that these formulas convey more interesting and distinctive impressions to the mind than the mere figures are capable of doing. We may have distinctive impressions, or clear ideas, connected with *small* numbers; but the numerical ideas con-

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veyed to our minds by the *larger* numbers are, practically, of a purely abstract, visionary character. If we see one man, or two men, or three men, or four men standing together, we can say at once, There is one man; or There are two men, or three men, or four men; as the case may be. If we see ten men in a group, however, we cannot tell at a glance just how many men there are; while, if we see ten thousand men, we could only make a wild guess as to their number. This being the case with number, as tangibly presented to the physical eye, it is not surprising that the ideas of number, as intangibly presented to "the mind's eye" by means of figures, should be of an exceedingly obscure and hazy character. The great advantage of using words as a means of remembering numbers lies in the fact that the word, or idea, representing a large number, conveys an impression to the mind that is as clear and distinctive as the impression conveyed by the word, or idea, representing a small number. The idea "Telescope," for instance, representing number 15,079, is as clear and distinctive to the mind as the idea "Yacht," representing number 1. Thus, it is possible and practicable—by the employment of formulas in the manner which has been shown—for persons possessed of no natural aptitude whatsoever for remembering dates and numbers in the usual way, to remember hundreds of dates and thousands of figures, with unerring precision. The pupil will find, on coming to apply the principle for himself to the remembrance of the dates of events, and other numerical facts, that, in many cases, he will be able to obtain ideas to represent the numbers which will be very appropriate to

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the particular subject. In other cases, however, it will be found that ideas so appropriate to the subject cannot be obtained. In such cases, the pupil's choice will lie between the effectual remembrance of the numbers by what we may term the utilization of nonsense, or the attempt to remember them in the ordinary way, that is, by the direct memorization of the figures themselves.

Having explained how—in addition to the year—the month, and day of the month, upon which an event occurred, may be remembered by means of a phrase or formula; we will, in the further examples introduced into the present lesson, give the year only. In the examples to be yet given we will use isolated words to represent the year,—words which may be memorized, in connection with the event, by association; and not merely by learning by heart.

1429. Joan of Arc entered Orleans: TURNIP.

1743. Handkerchiefs first made at Paisley: DECORUM.

In memorizing the dates of the births and deaths of celebrated persons, it is advisable to adopt some means of distinguishing between "Birth" and "Death," so that, when we have to recall to memory the formulas or words for the dates, we may not be liable to mistake the date of death of a certain person for the date of birth. We may arrive at the desired result by using a symbol to indicate death—*Weeping Willow*, for instance. We will understand that the presence of this symbol in our memory, in association with the word or words giving the date, will indicate Death; and the absence of the symbol, Birth. By

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the principle of recognition or identification of ideas, already spoken of, the pupil, in recalling to memory the date of the birth or death of any historical personage, will be able to recognize whether or not he has associated the symbol *Weeping Willow* with the numerical idea giving the date.

1305. Sir William Wallace died: DAMSEL—*Weeping Willow.*

1274. King Robert the Bruce born: STONE-QUARRY.

Where the individual judgment and fund of general information is not sufficient for the purpose: in order to distinguish in the memory between the dates of events happening before and after the beginning of the Christian Era—B. C. and A. D.—we may use the symbol *Altar* to indicate B. C. The presence of the symbol, in the memory, in association with the word or words giving the date, will indicate B. C.; and the absence of the symbol, A. D.

480 B. C. Battle of Thermopylæ: SERVICE—(*Altar.*)

1346 A. D. Battle of Cressy: WET MARSH.

If, however, the principal study be ancient history, we may use the symbol *Cross* to indicate A. D.; and when this symbol is not found associated in the memory with the word or words giving the date, it will be inferred that the date is B. C.

1410 A. D. Wire drawing invented at Nuremburg: THREADS—(*Cross.*)

490 B. C. Battle of Marathon: REPOSE.

To remember the dates of events which occurred in

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the present century, and which we well know occurred in the present century, it is only necessary to use a word to express the last two figures of the date, thus:—

1861. Fort Sumter fired upon by the State of South Carolina. *Fort Sumter*—SHOT.

Instead, however, of selecting, from the Phonetic Vocabulary, separate and distinct words to represent the year of each event, we may indicate all years—B. C. and A. D.—by means of a definite series of words to represent the respective Centuries; the words of the Table of Fixed Ideas, given in Lesson V, being used as auxiliaries. One advantage of this plan will lie in the fact that the principle of recognition or identification of ideas will be brought into play; seeing that, in recalling to mind the formulas or words representing the various dates, instead of the memory having to traverse the range of the entire language, it will be limited to the range of a certain definite and well known series of ideas. A series of forty words may represent the forty centuries of the pre-Christian Era, and a separate and distinct series of other nineteen words may represent the centuries of the Christian Era, so far as they have yet run. Below is given, by way of example, a series of words or ideas to represent the centuries of the Christian Era. As regards the dates of events in the First Century, they may be represented by the Fixed Ideas given in Lesson V; but it will be found advisable, nevertheless, to prefix a cipher to the dates of that century. In connection with the following series of words indicating centuries, it should

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be borne in mind that, except in the cases of the even centuries, the initial figures of dates do not represent the century in which an event occurred, but the century preceding. The figures 1886, for instance, represent a year in the Nineteenth Century.

0—Hose	7—Key	14—Tiara
1—Scythe	8—Hive	15—Saddle
2—Inn	9—Pie	16—Thatch
3—Ham	10—Seeds	17—Dock
4—Oar	11—Teeth	18—Thief
5—Owl	12—Satin	
6—Jew	13—Dam	

We now give examples, having the dates indicated by means of the above series of Century-words, in conjunction with the words of the Table in Lesson V. It is advisable to associate directly with the event itself (or its homophonic analogy or intermediary idea) not only the idea representing the century, but, also, the idea representing the remaining figures of the date.

1086. Doomsday Book of William the Conqueror completed: SEEDS—FISH.

1471. William Caxton erects, at Westminster, the first printing press in England: TIARA—GATE.

One constant tendency of using words as a means of memorizing and retaining dates and numbers is to promote thoughtfulness on the part of the pupil. If a series of dates of historical events be memorized by mere repetition, the pupil, in giving the dates from memory, gives them without thought, in a mechanical way. To reproduce, from memory, dates which have been memorized by means of the princi-

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ples explained in the present lesson, however, necessitates a deliberate operation of thought, in each instance. Moreover, the pupil is incited to keep his *judgment* on the alert; for instances frequently arise in which that faculty must enter in as an aid to the recollection, in distinguishing between, or in properly arranging, ideas which arise in the mind in connection with this matter, or with that. As to using symbols to indicate B. C. and A. D., the judgment of most persons will suffice for the purpose, without the use of the means which have been explained:—except, perhaps, in the dates of such events as happened towards the beginning of the Christian Era; that is, events which happened towards the close of the former era, or towards the beginning of the present. Although, in the present lesson, homophonic analogies, or intermediary ideas, have not been introduced into the various examples, the pupil will bear in mind that means should always be employed to obtain distinctive ideas with which to link words or phrases representing figures.

In memorizing numbers, dates, etc., by the means employed in the present lesson, it will be found that the act of memorization is, in reality, but the least part of the task. In most cases it takes much more time to search out an idea to represent a given date than to memorize the idea in connection with the event, after it is found. Indeed, the amount of actual memorizing required to impress a long series of dates upon the memory by means of equivalent words, phrases, or ideas, is very small. Students in a school or college, however, may advantageously divide among them the labor of selecting suitable equivalents

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to represent a long series of dates, etc. If, for instance, twenty students desire to memorize a certain series of one hundred dates, the series, in the first place, may be divided up; each student receiving five dates, for which it shall be his duty to select numerical equivalents. The twenty students then putting the results of their individual labor together, will each have the entire series of one hundred dates prepared for impression upon the memory. In this manner the whole task may be made to occupy but a very short time.

In the Appendix annexed to this work will be found selections of historical events, etc., all ready prepared for memorization by those who may desire to do so.

Lesson XII.—The remembrance of Historical Facts: also the Identification of Dates with Individual Monarchs bearing the same name.

A series of facts, or train of events, which happened within a certain historic period, or in connection with a certain country, or during the rule of a certain potentate, or the lifetime of some other historic personage, may be readily associated, in the manner explained in former lessons, with the particular period, or country, or ruler, or historic personage to which they refer. In associating sundry trains of

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events, however, with sundry monarchs bearing the same name—as William I, William II, William III, William IV—the principle employed below, in the memorization of the dates of accessions to the throne, will prove of good effect in the avoidance of confusion.

In remembering the respective dates of the Accessions, etc., of a line of Monarchs, homophonic analogies may be employed in many instances, as links between the name and the word or words indicating the date. It frequently happens, however, that there are several monarchs of the same name, distinguished only by a number; and, in such cases, an intermediary idea other than a homophonic analogy should be employed to prevent confusion. In such cases we may take the initial letter of the name, or any agreed upon letter of the alphabet, or a prominent syllable of the name; and let such letter or syllable stand for the name. For instance the letter *W*, or the syllable *Wil*, may be taken to represent *William;* or the letter *H*, or the syllable *Hen*, may be used to signify *Henry*. Then, to indicate *the number of the name*, a numerical letter or equivalent must be taken: and the whole embodied in one representative word. For example, to signify William I, we may select from the Phonetic Appendix a word beginning with the letter *W*—which represents the name—and ending with *t* or *d*—either of which represents the number. The word *Wheat*, for instance, will represent William I; and may be taken as an Intermediary between the name and the word giving the date. In the same way, William II may be represented by *Wagon;* William III by *Worm;* William IV by *Weir*. As an exercise, and by way of

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illustration, we now give a list of the Sovereigns of England and Great Britain, beginning at the Norman Conquest; with the dates of their respective accessions to the throne. The series is numbered, and is intended to be permanently associated with the Table of Fixed Ideas given in Lesson V. We give, firstly, the number of the Fixed Idea with which the name (or its homophonic analogy or intermediary) is to be associated; secondly, the name of the monarch; thirdly, the date of accession; fourthly, the homophonic analogy, or intermediary idea; and finally the word or words representing the date.

1.	William I	1066	Wheat	Odious judge.
2.	William II	1087	Wagon	Satisfying.
3.	Henry I	1100	Hound	Duteous ass.
4.	Stephen	1135	Steeple	Dyed mule.
5.	Henry II	1154	Harlequin	Hot dollar.
6.	Richard I	1189	Raft	Dyed fop.
7.	John	1199	Gong	Stout baby.
8.	Henry III	1216	Ham	Suet sandwich.
9.	Edward I	1272	Elephant	Satin gown.
10.	Edward II	1307	Eden	Sweet music.
11.	Edward III	1327	Elm	Sad maniac.
12.	Richard II	1377	Raven	Demagogue.
13.	Henry IV	1399	Heater	Steam pipe.
14.	Henry V	1413	Hall	Starry dome.
15.	Henry VI	1422	Hash	Eastern inn.
16.	Edward IV	1461	Ear	Tragedy.
17.	Edward V	1483	Easel	Outer fame.
18.	Richard III	1483	Rum	Dire fume.
19.	Henry VII	1485	Hack	Waterfall.
20.	Henry VIII	1509	Hive	Hatless boy.
21.	Edward VI	1547	Effigy	Woodlark.

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22.	Mary	1553	Dairy	Idle loom.
23.	Elizabeth	1558	Elizabeth	Daily levee.
24.	James I	1603	Jacket	Audacious sea-mew.
25.	Charles I	1625	Chest	Weedy channel.
26.	Interregnum	1649	Interment	Sweet cherub.
27.	Charles II	1660	Chain	Dutch cheese.
28.	James II	1685	Juryman	Sad shovel.
29.	William III	1689	Worm	Sottish fop.
30.	Anne	1702	Fan	Sweet cousin.
31.	George I	1714	Giant	Doctor.
32.	George II	1727	Garden	Thick snake.
33	George III	1760	Gem	Thick edges.
34.	George IV	1820	Gunpowder	Deafness.
35.	William IV	1830	Weir	Deaf miss.
36.	Victoria	1837	Victory	Tough swimming.

Lesson XIII.—Miscellaneous Applications of Association.

The names of the sixty-six books of the Old and New Testament Scriptures, in their order, with the number of chapters in each book, may be effectually memorized by associating them with the Table of Fixed Ideas; introducing homophonic analogies, or intermediary ideas, when necessary; and indicating the chapters by means of an equivalent word. Take, for instance:

Book	2	Exodus	40	chapters.
"	8	Ruth	4	"

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Book	9	I Samuel	31	chapters.
"	10	II Samuel	24	"
"	17	Esther	10	"
"	18	Job	42	"
"	20	Proverbs	31	"
"	27	Daniel	12	"
"	66	Revelation	22	"

Formulas to represent the above may be taken as follows:—

2. *Honey*, after its departure or EXODUS from the hive, finds its way to the *warehouse*.

8. *Ivy* is an evergreen; and so is the name of RUTH, which has been handed down from a remote *era*.

9. An *Abbey* was not the scene of the first of Samuel's devotions (I SAMUEL); nor any conspicuous *summit*.

10. The *Woods* would second Samuel's devotions (II SAMUEL) with an echo and not a *sneer*.

17. The *Wedding* of Queen ESTHER did not take place in an *Outhouse*.

18. The *Dove* is gentle; and so was JOB, whose afflictions pierced his soul like *iron*.

20. A *Noose* is often reserved for him who will not give heed to PROVERBS, but continues in a wicked *mood*.

27. A *Snake* was not with DANIEL in the lion's *den*.

66. A *Judge* is revealed in REVELATION who will overlook *none*.

To remember Book, Chapter, and Verse, in which certain passages of scripture are found, take the prominent idea of the passage; with it associate the name of the Book (or its representative word) and

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follow with words to indicate the number of the Chapter, and the number of the Verse, respectively. If, in the first place, the Books of the Bible be memorized in connection with the Table of Fixed Ideas, the respective words of the Table may be used to indicate or represent the names of the respective books, thus:—

Esther VII 10. So they hanged Haman on the gallows that he had prepared for Mordecai. *Gallows—wedding—hack—dice.*

In memorizing, in connection with various passages of scripture, the Book, Chapter and Verse in this manner, it will be found advisable to associate the idea representing the Chapter, not with the idea representing the Book, but, directly, with the prominent idea of the passage. In the association of sundry chains of ideas, the plan indicated should always be followed when one and the same specific idea happens to occur in the various chains.

Persons having difficulty in distinguishing in the memory, by number, the Ten Commandments, may readily do so by utilizing the first ten ideas of the Table given in Lesson V; associating the idea of each commandment with its numerically corresponding Fixed Idea.

But it is not out of place, in this connection, to remind the Christian reader, that, as regards essential religion as set forth by the teachings of Jesus, it is one of the distinctly specified offices of the Holy Spirit to influence, in His own mysterious way, the individual memory. Said the Lord Jesus Christ to His Disciples:—"The Comforter, which is the Holy Spirit, whom the Father will send in My name, He

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shall teach you all things, and bring all things to your remembrance, whatsoever I have said unto you." John XIV 26.

In Law, with the statement of a principle may be associated the name of the case deciding the point, the date of the decision, the title of the book in which the decision is recorded, and the volume and page. In the same manner, in connection with a principle of law, the statute, section, etc., may be effectively memorized. A lawyer applying the principles explained in the present treatise to the memorization of such matter, should, in the first place, tabulate the titles of the various books to which he is in the habit of making reference in his practice; so as to have each book of the series represented in his memory by a certain specific number, or representative word or idea.

By the application of the principles explained and illustrated in the present work, great assistance may be obtained by the student in the memorization, and orderly classification, of ideas such as arrangements in Botany, Geology, etc.

In Geometry, Statistics, Astronomy, etc., etc., numbers may be effectively memorized by the means illustrated in preceding lessons. Telephone numbers, safe combinations, catalogues, price lists, and other matters, may also be memorized by the same means.

Price-marks used in trade—in which letters represent figures or numerals—may be memorized, in a

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few moments, by association with the Table of Fixed Ideas; words being used the initials of which correspond with the letters representing the figures or numerals. Memorized in this way, a strange price-mark may be at once rehearsed from memory, forwards, backwards, and promiscuously. A person familiar with the numerical basis of the present Method, however, may use *it* as a price mark. Or, again, the words of the Phonetic Vocabulary may be utilized to represent numbers, in the absence of a telegraphic code or cipher.

Sometimes the memory may be assisted in the orderly remembrance of a short series of words (such as the names of the colors of the rainbow) by taking the initial letters of the series, and combining them in the form of a word. The resultant word will, of course, be arbitrary; yet it is found that, sometimes, even such a word may be utilized as an aid to the memory.

The student who reads over a few times a list of scientific terms—in anatomy, botany, or chemistry, for instance—will, generally, be able to repeat the series, in order, from memory, if *prompted* successively, with the first letters, or the first syllable, of each word. It has been demonstrated, in preceding lessons, that a long series of ideas, or objects, capable of being visualized or pictured in the mind, or associated by other process, may be very readily impressed upon the memory by a single careful reading. If, then, it be desired to memorize a series of, say, fifty scientific or technical words, a series of fifty easily memorized

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words may be taken to represent them, and to act as prompters. Each word of the representative series should bear the same initial letter, or the same initial syllable, as the scientific or technical word which it represents; or, where advisable, the principle of homophonic analogy may be introduced.

In memorizing long and confusing series of nouns, verbs, or other words embodied in rules in grammar, etc., the same plan may be employed. When, however, it is desired to learn such arbitrary lists of words by mere repetition, the student, where advisable, should re-arrange the succession of ideas in such a way that one word shall lead the mind as naturally as possible to the next.

It is evident that the *spelling* of any word, no matter how lengthy and how difficult it may be, may be very quickly and correctly memorized, by using a series of ideas to represent the various letters; each word of the series indicating, by its initial letter, the successive letters of the long and difficult word the spelling of which it is desired to remember. Indeed, it will be evident that, by the means suggested, such a long and difficult word may be speedily and correctly spelt from memory, not only forwards but *backwards*.

It is possible to reproduce from memory any series of articulated sounds, by using a complete alphabet of sounds, each sound being distinctively numbered. In this way, the successive sounds may be translated into numbers, and the numbers into intelligible ideas, which may be readily impressed upon the memory. To reproduce the succession of

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original sounds, the process of memorization will be reversed; the intelligible ideas being first recalled to mind, then the numbers which they represent, and, finally, the sounds represented by the numbers.

In Chemistry, the Table of Elementary Substances, with the combining proportions—according to both the Oxygen and Hydrogen standards—may be effectually memorized by the application of principles already explained. Chemical formulas may be remembered, by using words beginning with the letters in the formula, and taking other words to represent the numbers, thus:—H 1; O 16; S 32. *Ham-stew—Ox-dish—Safe-money.*

In Music, the various principles already illustrated may be utilized in many ways. But we will take but two brief examples.

The names of the notes are as follows:—

(*Instrumental*) C D E F G A B.
(*Vocal*) Do Re Mi Fa Sol La Ti.

These instrumental and vocal names of the same notes may be effectually and speedily identified with each other in the memory of the beginner, by memorizing a series of representative words, the initial letters of which shall be identical with the instrumental names, and the latter consonants of which shall indicate the vocal names. The following series of words or ideas may be taken:—Cod, Door, Emu, Fife, Goose, Apple, Bat.

The names of the notes of the Treble and Bass Clefs, including ledger lines, may be easily memorized by means of representative words associated with the

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Table of Fixed Ideas: the word representing, by its initial letter, the note on the first line being associated with the first Fixed Idea—Hat—, and the word representing the note on the first space being associated with the eleventh Fixed Idea—Tide—, which, with its following fixed ideas, may be, for the purpose, understood to represent 1, 2, 3, etc., instead of 11, 12, 13, etc.

Or, in place of memorizing the notes through the medium of "the mind's eye," they may be impressed upon the memory through the medium of the physical eye. This may be done by making a diagram of the staff, and sketching, or pasting, on the lines, and in the spaces, representations of objects, the names of which begin with the letters of the notes; those on the lines being darkly colored and those in the spaces being uncolored.

The association of the names of persons with the persons themselves, so as to be able to call individuals by name upon meeting them, is a faculty that can only be slowly developed in persons who do not exhibit it naturally and spontaneously. The person who would develop this power must acquire the habit of looking attentively at individuals when introduced to them, and marking the individuality or peculiarity of their features, expression, and general appearance; but not of their dress which is liable to change. The name of the individual should be mentally written upon his face, or the idea suggested by his name should be associated with his personality, as it happens to strike us. This is a subtile operation of the mind; but, nevertheless, the power of remem-

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bering names may be gradually developed in this way; so that the sight of the face or general personality of an individual shall recall the name associated with it.

When a person affirms that he has a "poor" memory, he uses a comparative term. Compared with some one who has a more powerful memory, he may be said to have a "poor" memory. In reality, however, even a "poor" memory is wonderful in its power; a fact which may be realized by any one who will just reflect upon the vast multitude of minute details, concerning a vast multitnde of diverse matters, which, having gradually become intertwined with his daily life and habits, he carries unconsciously in his memory. The difference between the knowledge of the infant and the knowledge of the grown-up man is, very largely, a matter of memory.

But not only are many persons inclined to unjustly disparage their memory, by contemptuously calling it "poor," "useless," "utterly treacherous," and so forth; they show a great readiness to make the memory a scape-goat for failings which cannot be justly laid to its charge. Persons forget umbrellas, gloves, packages; they forget to send their promised contribution to the poor fund; they forget to return borrowed articles; they forget to close the door behind them; they are constantly putting articles away in drawers and other places, and then forgetting where they put them. All such things they lay, in an abstract way, to the charge of their memory, while, in reality, in the great majority of cases, they should charge them directly against themselves as individuals;

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recognizing in such things simply the natural results which flow from undisciplined minds, disorderly personal habits, and the neglect of latent powers. In some cases the power of memory is injured by deliberate transgression of the laws of physical health.

Without leaving the sphere of mental philosophy and proceeding any great distance into the domain of moral philosophy, we would quote from "The Pleasures of Memory," by Rogers, the lines:

> Sweet memory! wafted by thy gentle gale,
> Oft up the stream of time I turn my sail
> To view the fairy haunts of long-lost hours,
> Blessed with far greener shades, far fresher bowers.

Now, "the pleasures of memory," like a great many other pleasures, may be unhealthy; and indulgence in them may oftentimes clearly indicate a mind diseased. While, with most persons, perhaps, there are hallowed memories which, most righteously, may be cherished; the tendency, so common among men, to turn their eyes from the truthful realization of the present and the future, to dwell in meditation upon the past, is, emphatically, an evil sign. Although a healthy mind, may, at times, take an excursion into the realm of hallowed recollections, it will not habitually live in the past; but, rather, will truthfully realize the present time, and boldly face the future. The fact that so many persons live habitually in the past is to be attributed, very largely, to moral cowardice. For good reasons, reasons well known to themselves, these persons cannot face the future and cheerfully meditate upon their destiny. Not having made their peace with God, they have no bright expectations in the life beyond—as others have—and, consequently, they seek to stifle all thought of the future by dwelling amid the

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memories of the past. Like the ostrich, the emblem of forgetfulness, which hides its head in the sand and imagines that because it cannot see its pursuer it has effectually escaped from him, multitudes of men avert their eyes from the contemplation of their eternal destiny, and, soothing themselves with "the pleasures of memory," drift onward to despair. The sentiment expressed in the foregoing extract from "The Pleasures of Memory" is not a healthy sentiment, but the reverse; and is in striking contrast to the words of the inspired apostle when he said: "This one thing I do: forgetting those things which are behind, and reaching forth to those things which are before, I press toward the goal for the prize of the high calling of God in Christ Jesus." Phil. III 13.

In this treatise upon Systematic Memory many other illustrations might have been given of the principles which have been explained: seeing that the applications are practically endless, being limited only by the aptness and ingenuity of the pupil. All the illustrations which are necessary, however, have been given: and, in conclusion, the writer would advise the reader to remember that the System is designed as an *aid* to the natural memory, and not as a *substitute* for it. No pupil should think of becoming a mechanical slave to this or to any other System; but, on the contrary, the principles which have been explained and illustrated should be used by every pupil intelligently and *judiciously*.

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APPENDIX.

PHONETIC VOCABULARY OF NOUNS AND ADJECTIVES.

Many adjectives not printed in this Appendix—adjectives ending in y, and of the same numerical value as their nouns which are printed—may be formed from such nouns: examples, wit, witty; dusk, dusky; ice, icy. Moreover, many words given as nouns may be used as adjectives: examples, wise, waste, sane, hollow.

Nouns by adding s in the plural have their numerical value increased; thus, arrow, 4, arrows, 40; jewel, 65, jewels, 650.

00. Ice-house, oasis, sauce, seesaw, size. **0**. Ace, ass, assay, ease, essay, eyes, haze, hiss, hose, house, hussy, huzza, ice, ooze, saw, say, sea, sigh, sway, use, whiz, wise, woes. **1**. Acid, adieu, aid, aide, asset, city, day, dew, die, dough, due, dye, eddy, haste, hate, head, heat, heath, heed, height, hit, hod, hood, hut, idea, oath, ode, seat, seed, set, settee, soot, sot, stew, suet, suit, sweat, tea, tie, toy, waist, wait, waste, weed, weight, wheat, whist, widow, wit, wood, yacht, youth, zest. Haughty, hot, odd, sad, sweet, used, weighed, wet, wide. **2**. Ennui, hen, hone, hyena, hyson, inn, knee, neigh, sane, scene, scion, season, seine, senna, sign, sinew, snow, son, sun, swain, swan, swine, swoon, wane, wen, whin, whine, wine, yawn, zone. New, wan. **3**. Ahem, aim, asthma, ham, hame, hem, hum, hymn, maw, moa, mow, psalm, schism, seam, seamew, sum, swim, whim, yam, same, some. **4**. Aerie, air, area, arras, array, arrow, assayer, assessor, czar, ear, era, hair, hare, heir, hero, hewer, hire, hour, hurry, hus-

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sar, ire, oar, ore, ray, roe, row, rye, seer, sewer, sorrow, sower, user, war, ware, weigher, weir, wherry, wire, wooer, worry, year. Aware, awry, hoar, hoary, raw, sear, sorry, sour, wary, weary, wry. **5**. Aisle, ale, alley, alloy, ally, cell, easel, eel, hail, hall, halo, heel, hole, hollow, holly, howl, hull, isle, law, lea, lie, lye, oil, owl, sail, sale, seal, sleigh, soil, sole, solo, swallow, swell, swill, wail, wall, weal, weasel, well, whale, wheel, wile, will, willow, wool, yawl, yell, zeal. Hale, hilly, ill, lay, low, sallow, silly, slow, sly, sole, well, whole. **6**. Age, ash, edge, hash, hatch, hedge, hitch, hush, issue, itch, jaw, jay, Jew, joy, sage, sash, sedge, siege, shoe, show, switch, usage, wage, wash, wedge, wish, witch. Huge, shy, wheyish. **7**. Ache, ague, cow, cue, echo, egg, hack, hag, hawk, hissing, hock, hog, hook, hug, husk, key, quay, queue, sack, sago, sake, saying, scow, sea-cow, sewing, sky, soak, sock, song, sowing, suing, swing, wag, wake, walk, whig, wick, wig, wing, yoke, yolk. Awake, coy, sick, weak. **8**. Avowee, eve, fay, fee, foe, half, heave, hive, hoof, huff, oaf, ova, safe, savoy, sieve, sofa, view, vow, waif, wave, whiff, wife, woof, zouave. Few, heavy, safe. **9**. Abbe, ape, asp, bay, bayou, beau, bee, bey, boa, bohea, bough, bow, boy, buoy, by-way, ebb, hautboy, heap, hob, hobby, hoop, hop, hope, hub, paw, pay, pea, pew, pie, sap, sepoy, sip, soap, sob, sop, soup, spa, spy, swoop, wasp, web, whip, whoop. By, happy. **10**. Adze, assets, dace, daisy, deuce, dice, dose, hostess, hothouse, idiocy, oats, odds, outhouse, toss, waits. Assiduous, dizzy, hideous, odious. **11**. Acidity, assiduity, audit, date, dead, death, debt, deed, diet, ditty, dodo, doubt, duty, estate, idiot, oddity, state, statue, steed, stud, study, tattoo,

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thought, tidy, tithe, toad, toady, toddy, tooth, width, widowhood. Astute, doughty, dowdy, dyed, hated, heated, sedate, staid, steady, stout, tidy, tight, wedded, witted, wooded. **12**. Dawn, dean, den, din, don, down, dun, heathen, iodine, satin, sedan, stain, stone, tan, tin, tine, ton, tone, town, tun, tune, twin, twine. Done, dun, oaten, stony, sudden, tawny, thin, tiny, wheaten, wooden. **13**. Atom, autumn, dam, dame, dime, dome, doom, esteem, idiom, item, odium, sodium, steam, stem, system, team, theme, thumb, thyme, time, tome, wisdom, zootomy. Demi, dim, dumb, tame. **14**. Adder, aider, attire, author, cider, citer, dairy, dare, deer, diary, doer, door, dower, dowry, draw, drawee, dray, dyer, eater, eider, estuary, ether, hater, hatter, header, heater, heather, hider, high-water, history, hydra, odor, otter, oyster, satire, setter, sitter, star, stare, steer, stir, store, story, straw, suitor, tar, tare, tear, theory, throe, throw, tiara, tier, tire, tory, tour, tower, tray, tree, trio, tyro, wader, waiter, waster, water, weather, weeder, wether, wheat-ear, widower. Austere, dear, dire, dry, outer, thorough, true, utter. **15**. Dale, deal, delay, dell, dial, dole, doll, duel, hotel, huddle, ideal, idyl, outlaw, outlay, saddle, settle, stall, steal, steel, stile, still, stole, stool, style, tail, tale, tallow, tally, tile, till, toil, toll, tool, towel, twill, waddle. Daily, dual, dull, hostile, idle, sightly, stale, still, subtle, suicidal, tall, whitely. **16**. Adage, attache, dash, dish, dodge, duchy, Dutch, hostage, stage, stitch, stowage, thatch, tissue, tough, towage, twitch, whitewash. Sottish, sweetish, toyish, wettish. **17**. Aiding, adding, attack, attic, awaiting, decay, deck, decoy, dike, dock, dog, doing,

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duck, duke, dying, eating, ethic, haddock, headache, heading, heating, hiding, hitting, hooting, outing, seating, seething, setting, siding, sitting, soothing, stack, stag, stake, stalk, steak, stewing, stick, sting, stock, stook, stoic, stowing, stucco, suiting, sweating, tack, tag, take, talk, thawing, thing, thong, thug, tick, tong, tongue, toying, tuck, tug, twig, tying, wadding, wading, waiting, wasting, weedhook, weeding, whiteoak, whiting, yachting, zodiac. Ascetic, awaiting, seceding, thick. **18**. Dive, dove, staff, stave, stove, stuff, taffy, thief. Deaf, stiff, tough. **19**. Daub, debut, deep, depot, dip, dupe, stab, steep, step, steppe, stoop, stop, stub, tabby, tap, tape, tip, top, tube, type. **20**. Anise, easiness, essence, gneiss, henhouse, niece, news, noise, nose, ounce, sauciness, science, sense, sneeze, wiseness. Heinous, nice, noisy, sinuous, uneasy, unwise. **21**. Annuity, ant, ascent, assent, aunt, cent, end, gnat, hand, haunt, hind, hint, hound, hunt, knight, knot, knout, naiad, need, newt, night, nod, note, nut, saint, sand, sanity, scent, senate, sonata, sonnet, snood, snout, sound, Sunday, synod, unit, unity, wand, want, wind, window, wont, wound, zenith. Innate, naughty, neat, sinewed, sound, unawed, undue. **22**. Ninny, noon, noun, onion, union. Inane, known, unhewn. **23**. Enemy, name, zoonomy. Numb. **24**. Annoyer, gnawer, honor, new-year, owner, senior, sinner, snare, sneer, whiner, winner, winnower, yawner. Inner, narrow, near, newer, unwary, unweary. **25**. Annual, inlay, knell, knoll, nail, snail. Null, only, unholy, unwell. **26**. Haunch, hinge, hunch, inch, notch, winch. Swinish. **27**. Awning, cynic, knack, knock, nag, neck, neighing, nick, nook, seasoning,

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sneak, swooning, whining, winning, winnowing, yawning. Annoying, knowing, snug, unique, waning. **28**. Envoy, envy, knave, nave, navvy, navy, nephew, snuff. Enough. **29**. Nap, nape, nib, nip, snap, snip, snipe, snob. Knobby, neap, unhappy. **30**. Alms, isthmus, mace, maize, mass, maze, mess, meuse, mews, mice, miss, moss, mouse, muse, muss, whimsey. **31**. Amity, emmet, maid, mat, mate, mayday, mead, meat, meed, meet, middy, midway, might, mite, moat, mode, moiety, mood, moth, mote, motto, mouth, mud, mute, myth, smith, summit. Humid, mad, mid, smooth. **32**. Highwayman, man, main, mane, manna, men, mine, minnow, moan, money, omen, yeoman. Human, humane, many, mean. **33**. Imaum, maim, mamma, mime, mome, mum, simoom, whimwham. **34**. Amour, emery, emir, humour, maori, mare, marrow, mayor, mire, mohair, moor, morrow, mower, myrrh, summary, summer, swimmer. Mere, merry, more, smeary. **35**. Homily, mail, male, mall, meal, mile, mole, mule, mull, simile, smell, smile. Homely, mellow, seemly, small. **36**. Homage, image, magi, mash, match, mesh, midge, smash. Much, mushy. **37**. Hammock, hemming, humming, make, mica, mewing, mock, mowing, muck, mug, smack, smoke, swimming. Assuming, meek, seeming, smoky. **38**. Mauve, miff, move. **39**. Hemp, hump, imp, mob, mop, mope, swamp. **40**. Hearsay, hearse, heiress, heresy, race, rice, rise, rose, ruse, scissors, series, source, warehouse, wares. Hoarse, racy, serious, worse. **41**. Art, award, earth, errata, hazard, heart, hearth, herd, hoard, horde, hurt, rat, rate, right, reed, riot, rite, rod, rood, root, rout, route, rut, sort,

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surety, sward, sword, ward, wart, word, worth, wrath, wreath, writ, yard. Arid, hard, hardy, high-wrought, horrid, ready, ruddy, rude, swarthy, wayward, wearied, wroth, wrought. **42**. Arena, czarina, heroine, horn, iron, irony, rain, reign, rein, ruin, run, runaway, urn, warren, yarn. Serene, sworn, worn. **43**. Arm, aroma, harem, harm, ram, ream, rhyme, rim, Rome, room, rum, swarm, worm. Warm. **44**. Arrear, aurora, error, harrier, hearer, hirer, horror, rear, roar, rower, swearer, warrior, wearer. Rare. **45**. Airhole, earl, reel, relay, rill, role, roll, rule, whirl. Aerial, early, hourly, oral, real, royal, surly, yearly. **46**. Arch, rage, rash, ratio, reach, rich, ridge, roach, rouge, rush, search, surge, wretch. Harsh, sourish. **47**. Airing, ark, earwig, harangue, hearing, herring, rack, rag, rake, reek, ring, rogue, rook, rug, swearing, work, wreck. Harrowing, heroic, rocky. **48**. Reef, reeve, review, rough, ruff, seraph, serf, surf, survey, wharf. **49**. Harp, harpy, herb, orb, rabbi, rib, robe, rub, sirup, warp, wrap. Ripe, ropy. **50**. Alehouse, aloes, lace, lassoo, lease, lessee, loss, slice, sluice, solace. Lazy, less, loose, useless, wayless, zealous. **51**. Assault, elite, eyelet, eye-lid, halt, health, hilt, hold, holiday, household, iliad, islet, lad, lade, lady, laity, lath, lathe, laud, let, lid, light, load, loot, lot, lout, lute, owlet, salad, salt, salute, slat, slate, sled, sleet, slide, slight, slit, sloth, wallet, wealth, welt, wold, yield, zealot. Late, lewd, lithe, loath, loud, old, solid, wieldy, wild. **52**. Alien, lane, lawn, lean, lien, line, loan, loon, saloon, slain. Alone, lean, lone, saline, sullen, swollen, woolen. **53**. Alum, asylum, elm, helm, lama, lamb, limb, lime, loam, salam, slime.

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Lame, slim, solemn. **54**. Allayer, celery, cellar, hailer, healer, lair, lawyer, layer, leer, liar, lire, lore, lure, owler, sailor, salary, sealer, seller, slayer, slur, sweller, waylayer, whaler. Lower, solar. **55**. Ill-will, loll, lull. Lowly, loyal. **56**. Elegy, eulogy, eyelash, latch, leash, leech, ledge, liege, lodge, slash, sledge, slush, zoology. Slouchy, willowish, yellowish. **57**. Allaying, ceiling, elk, hailing, hallooing, hallowing, hauling, healing, hillock, hollyhock, howling, hulk, lac, lack, lackey, lake, laying, league, leak, leek, leg, like, ling, lock, log, look, lowing, luck, lug, lung, lying, sailing, sealing, selling, silk, slack, slang, slaying, sling, slug, sulk, sullying, swallowing, swelling, wailing, wallowing, whaling, yelling. Sleek, willing. **58**. Elf, helve, laugh, lava, leaf, leave, levee, levy, life, love, olive, salve, salvo, slave, sleeve, sylph, wolf. Alive, live. **59**. Alibi, elbow, help, lap, leap, lip, lobe, loop, lop, slab, slap, sleep, slip, sloop, slop, slope, whelp, yelp. Asleep. **60**. Ashes, chaise, chase, chess, choice, Jewess, juice, wages, wash-house, watch-house. Joyous. **61**. Associate, chat, cheat, escheat, hatchet, jade, jet, jetty, jute, shad, shade, sheath, shed, sheet, shoot, shot, shout. Aged, chitty, edged, wished. **62**. Chin, China, cessation, genii, gin, jenny, ocean, secession, session, sheen, shin, suasion. Ashen, shiny. **63**. Chamois, chime, chum, jam, sham, shame. **64**. Cheer, cherry, hedger, hedgerow, jar, jeer, jury, seizure, share, shire, shore, shower, shrew, usher, usury, wager, washer, watcher. Azure, chary, sure. **65**. Chill, jelly, jewel, satchel, shale, shawl, shell, shoal. Agile, jolly, shallow, social, usual. **66**. Chou-chou. Jewish, showish. **67**. Chalk, check,

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cheek, cheque, chick, chuck, edging, etching, hatching, hedgehog, hedging, jig, jockey, jog, joke, shake, shock, washing, watching. Choky, jaggy, shaggy. **68**. Chafe, chaff, chief, shave, sheaf, shove. **69**. Chip, chop, gibe, jib, job, shape, sheep, shoeboy, shop. Cheap, chubby, shabby. **70**. Case, cause, causeway; chaos, cowhouse, gas, gauze, goose, guess, guise, hoax, kiss, ox, squeeze, wax. Aqueous, cosy. **71**. Act, cadi, cat, coat, cod, code, cut, equity, gaiety, ghaut, goad, good, gout, guide, gut, kid, kite, quiet, scout, sect, skate, socket, wicket. Acute, caught, gaudy, giddy, hawked, hawk-eyed, hooked, husked, keyed, squat, wicked, winged. **72**. Agony, can, cane, canoe, coin, cone, gain, gown, guinea, kin, kine, queen, skein, skin, wagon. Canny, gone, keen. **73**. Calm, cameo, coma, comb, comma, game, gum, oakum, scheme, scum, wigwam. **74**. Acre, asker, auger, augury, caraway, care, carry, choir, cigar, co-heir, core, crew, crow, cry, cur, cure, curry, equerry, esquire, euchre, gear, goer, gore, hanger, hawker, ochre, ogre, quarry, query, quire, scar, scare, score, scour, screw, seeker, singer, skewer, skurry, soaker, square, succour, sucker, swagger, swinger, waggery, waker, walker, whisker, wise-acre. Eager, grey, queer, secure, wicker. **75**. Call, caul, chyle, clay, claw, cloy, clue, coal, coil, colly, cool, coolie, cowl, eclat, equal, gala, gale, gall, galley, gill, glee, glow, glue, goal, guile, gully, hackle, haggle, icicle, kale, keel, keyhole, kill, kiln, ogle, quail, quill, scale, school, scowl, seagull, sequel, sickle, skill, skull, squall, squeal. Sickly, ugly, weakly, weekly. **76**. Cage, cassia, coach, couch, gash, gauge, gouge, gush, hogwash, quayage,

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sketch. Haggish, hoggish, sickish, waggish, whiggish. **77**. Aching, asking, awaking, cake, caulk, cock, cocoa, cog, coke, cooing, cook, cuckoo, echoing, egging, gag, gang, gawk, geegaw, gig, going, gong, gowk, hacking, hanging, hawking, hooking, hugging, husking, ink, keg, kick, quack, quake, quick, sacking, seeking, singing, soaking, squeak, sucking, swinging, whisking, wagging, waking, walking, yankee. **78**. Cafe, calf, coffee, cough, cove, covey, 'cuff, scoff, skiff. **79**. Cab, cap, cob, coop, copy, cub, cube, cup, escape, gap, gape, go-by, hiccup, keep, scoop, scope, squib. **80**. Eaves, face, fez, fizz, fosse, fuse, fusee, fuss, heaves, hives, office, phase, vice, voice, wives. **81**. Faith, fat, fate, feat, feed, feet, feud, fight, fit, food, foot, haft, safety, suavity, veto, void, vote, zoophyte. Afoot, avowed, ivied, soft, swift. **82**. Avenue, euphony, fawn, fen, fin, fine, fun, haven, heaven, oven, savanna, savan, syphon, van, vane, vein, vine. Even, vain, woven. **83**. Fame, fume, vim. **84**. Affair, affray, aviary, avower, cipher, fair, fairy, fare, faro, fear, ferry, feuer, fir, fire, foray, fray, fry, furrow, fury, heifer, hover, ivory, offer, ovary, sapphire, saver, savor, sphere, vower, wafer, waver, weaver, zephyr. Far, fewer, fore, free, furry, severe, very. **85**. Avail, avowal, evil, fail, fall, fallow, feel, fell, fellow, felloe, file, fill, filly, flaw, flay, flow, flue, foal, foil, folio, folly, fool, fowl, fuel, full, hovel, offal, oval, swivel, valet, valley, value, veal, veil, vial, villa, viol, volley, waffle, weevel. Awful, civil, easeful, evil, foul, useful, vile, woful. **86**. Effigy, fetch, Figi, fuchsia, fudge, savage, vouch, voyage. Fishy, oafish. **87**. Fang, fig, folk, having, havoc, heaving, offing, saving, vogue, waving, weav-

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ing. Civic, foggy, vague. **88**. Feoff, fœof-fee, fief, five. **89**. Fib, fob. **90**. Abbacy, abbess, abuse, abyss, baize, base, bass, bias, boss, bouse, buzz, pace, pass, pause, peace, pease, piece, poesy, poise, posy, puss, space, spice. Bousy, busy, obese, pious. **91** Abbott, abode, apathy, bait, bat, bath, bead, beauty, bet, bid, bit, bite, body, boot, booth, booty, boyhood, bud, butt, habit, obit, opiate, pad, pate, path, pay-day, peat, pet, pit, piety, pith, pity, poet, pot, putty, Sabbath, spade, speed, spite, spot, spout. Bad, pat, petty, webbed. **92**. Ban, bann, bane, bean, bin, bone, boon, bun, ebony, pain, pan, pane, pawn, pen, penny, pine, pony, pun, span, spine, spoon, weapon. Bonny, open, puny, supine. **93**. Balm, beam, bomb, boom, opium, poem. Palmy. **94**. Bar, barrow, bear, beer, berry, boar, boor, bore, borough, bower, bray, brow, bureau, burgh, burrow, buyer, heaper, Hebrew, ospray, pair, par, pear, peer, pier, poor, pore, power, prey, prow, pyre, sabre, sapper, spar, sparrow, spear, spire, spur, supper, sweeper, weeper, wiper, whipper, whisper. Bare, pure, sober, spare, upper. **95**. Appeal, apple, bail, bale, ball, ballet, bile, bill, billet, billow, blow, boil, bowl, bull, by-law, hobble, obole, opal, pail, pall, peal, peel, pill, pillow, play, plea, plough, pole, poll, pool, pull, pulley, spell, spoil, spool, supply. Able, blue, pale, seizable, sizeable, supple, uphill. **96**. Badge, batch, beach, beech, bosh, botch, pacha, page, patch, peach, pitch, pouch, push, specie, speech. Apish, boyish, bushy, uppish, waspish. **97**. Back, bag, bake, bang, beak, beck, being, bog, buggy, bung, buying, bywalk, ebbing, epic, pack, peak, peg, pick, pig, pike, pique, speck, spike, spoke, weeping, whip-

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ping. Big. **98**. Beehive, behoof, bevy, buff, buffet, by-view, puff. Beefy, buff. **99**. Babe, baubee, bib, bob, booby, hubbub, papa, peep, pip, poop, pop, pope, poppy, pup. **100**. Decease, disease, disuse, Sadducees, thesis. **101**. Atheist, audacity, deceit, dust, outset, outside, taste, test, theist, toast, twist. Tacit, testy. **102**. Citizen, design, dozen. **103**. Atheism, deism, dismay, theism. **104**. Desire, dicer, disarray, dozer, howitzer, soothsayer, teaser, tosser. **105**. Tassel, thistle. Docile. **107**. Desk, disc, dozing, dusk, soothsaying, task, teasing, tossing, tusk. **108**. Adhesive. **110**. Dead-Sea. Dutious, studious, tedious. **111**. Attitude, statute. Debted, dotted, hotheaded, studied, tattooed, toothed. **112**. Teuton. **113**. Daytime, diadem, seed-time, te deum, tedium. **114**. Auditor, auditory, daughter, debtor, doubter, editor, statuary, stature, studier, stutter, tatter, tether, theatre, titter, tutor, twitter, wet-weather. Citatory, tawdry. **115**. Citadel, detail, suit-at-law, tattle, title, tittle, total. Deadly, dotal, stately. **116**. Dotage. **117**. Dieting, teething, tithing, toothache. Doting, doubting, hesitating, idiotic. **118**. Dative, sedative. **120**. Aidance, assistance, audience, dance, dunce, hastiness, haughtiness, headiness, hotness, oddness, sadness, sootiness, stanza, sweetness, tansy, tennis, tense, townhouse, weightiness, wetness, whiteness, wideness, witness, wittiness. Dense, idoneous, tenuous. **121**. Assistant, dandy, dent, dint, stand, stint, taint, taunt, tent, tenet, tenuity, tint. Attenuate, dainty. **122**. Athenian, tannin, tenon. **123**. Atheneum. **124**. Deanery, dinner, donor, dunner, stainer, sweetener, tanner, tannery, tenor, tenure, tinner, tuner, whitener. **125**. Denial, down-hill,

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tunnel. **126**. Danish, dunnage, stench, tench, tinge, tonnage, twinge. Dingy, heathenish, staunch, stingy, thinish. **127**. Dining, stunning, tonic, tunic, whitening. Ethnic. **129**. Danube. **130**. Demise. **131**. Dimity, estimate, sweetmeat. Doomed, timid. **132**. Demon, domain, hodman, ottoman, stamina, toyman, woodman. **134**. Demur, esteemer, stammer, tamer, tumour. Demure. **135**. Oatmeal. **136**. Damage. Dimish. **137**. Stomach. Teeming, steaming. **139**. Damp, dump, stamp, stump, thump, tomboy. **140**. Address, dress, dross, stairs, stress, terce, terrace, tierce, trace, tress, trice, truce, truss, waterhose, withers. Drowsy, terreous, weatherwise. **141**. Austerity, dart, dearth, dirt, dread, drought, druid, dryad, duriety, Easter-day, hatred, start, steward, strait, strata, strath, street, stride, strut, sweetheart, tart, thread, threat, throat, trade, trait, tread, treat, treaty, tret, triad, trot, troth, trout, truth, turret, woodyard. Adroit, dowered, drouthy, outward, starred, storied, straight, sturdy, tardy, tart, torrid, trite. **142**. Attorney, cistern, citron, darn, drain, drone, setter-on, stern, strain, thorn, throne, tourney, train, turn, tyranny. Citrine, drawn, eastern, outworn, stern, western. **143**. Dew-worm, drachm, drama, dream, drum, stream, storm, term, theorem, tram, trim. **144**. Adherer, adorer, drawer, drier, starer, steerer, stirrer, storer, tarrier, tearer, terrier, terror, thrower, trier, utterer, waterer. Drear, dreary. **145**. Drawl, drill, stroll, thrall, thrill, trail, trial, trill, trowel, twirl. Austral, droll, easterly, ethereal, sterile, westerly. **146**. Dirge, ostrich, outrage, starch, steerage, stretch, targe, thrush, torch, trash. Waterish. **147**. Attir-

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ing, daring, dark, dirk, drag, drake, drawing, drug, staring, stork, streak, strike, string, stroke, tearing, throng, track, trick, truck, Turk, Turkey. Daring, dark, Doric, dreggy, satiric, staring. **148**. Draff, drive, drove, dwarf, Easter-eve, strife, tariff, trough, trophy, turf. **149**. Drab, drop, stirrup, strap, strip, stripe, throb, trap, tribe, trip, tripe, troop. **150**. Atlas. Aidless, headless, heedless, sedulous, witless, weedless, weightless. **151**. Adult, daylight, delight, dolt, hostility, outlet, sedulity, stealth, stiletto, tilt, toilet, utility, white-lead. **152**. Italian, outline, talon. **153**. Dilemma, white-lime. **154**. Dallier, dealer, delayer, dollar, dueller, dweller, hostelry, idler, outlawry, stealer, sutler, tailor, teller, tiler, tiller, wheedler. Stellar. **156**. Deluge, osteology, theology, tillage. Stylish. **157**. Dealing, dialogue, duelling, dwelling, italic, outlook, seedling, settling, stealing, tilling, toiling, wedlock. Headlong, outlying. **158**. Delf. **159**. Tulip. **160**. Duchess. Audacious, seditious. **161**. Digit, touchwood, woodshed. **162**. Addition, adhesion, citation, dudgeon, edition, sedition, situation, station, tuition. **164**. Ditcher, stager, stitcher, teacher. **165**. Touchhole. **167**. Ditching, staging, teaching, touching, twitching. Dashing. **169**. Toyshop. **170**. Eating-house, ethics, hatcase, stocks, tacks, tax. **171**. Decade, docket, ducat, edict, etiquette, outgate, stockade, thicket, ticket. Adequate, dogged. **172**. Deacon, setting-on, token. **173**. Dogma, stigma. **174**. Dagger, decree, degree, digger, ducker, outcry, stagger, taker, talker, tiger. **175**. Doghole, dunghill, tackle. Ducal, ethical, stoical. **176**. Dog-watch. Doggish. **177**. Ducking, heathcock, oatcake, seedcake,

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stocking, taking, talking, tank, woodcock. **Decaying**, decoying, stinging. **179**. Teacup. **180**. Advice, device, dovehouse, edifice, staves. Devious, diffuse. **181**. Defeat, devotee, taffeta, theft, turf. Deft, devoid, devout, stuffed. **182**. Dauphin, divan, divine, tiffany. **184**. Defier, devoir, diver, duffer, edifier, thievery. **185**. Day-fly, defile, devil, odd-fellow. Hateful, heedful, wistful, youthful. **186**. Deafish, thievish. **187**. Diving, stuffing. Edifying. **190**. Headpiece, topaz. Dubious, tipsy. **191**. Debate, depth, debit, deputy, hotbed, teapot, tippet, tiptoe. Stupid, tepid. **192**. Stewpan, woodbine. **194**. Dauber, dew-berry, diaper, dipper, stabber, stupor, tabour, taper, tapir, tipper, topper. Dapper. **195**. Stable, staple, steeple, stubble, table, tipple. Audible, dapple, debile, double, eatable, edible, suitable. **196**. Debauch, debauchee, stoppage. **197**. Day-book, tapping, tobacco, topic. Typic. **198**. Top-heavy. **200**. Census. **201**. Honesty, inside, insight, nest, nicety, onset, sunset. Honest, nasty, unhoused, unset, unsought, unused. **202**. Ensign, insane, unison. Unseen, unsown. **203**. Noisome, winsome. **204**. Answer, censer, censor, sneezer, snoozer. Sincere. **205**. Nozzle. Nasal. **207**. Nose-gay, sneezing, unseeing. **208**. Unsafe. **209**. News-boy. **210**. Handsaw, notice, senate-house. Nodous. **211**. Entity, knighthood, nightdew, nudity. Handed, haunted, knitted, knotted, noted, sanded, snouted, unaided, unheated, unheeded, untaught, wonted. **212**. Anodyne, Indian. Undone, wanton. **213**. Anathema, anatomy, anthem. **214**. Centaur, centre, century, cinder, entry, hander, haunter, hunter, knitter, nature, needer, nitre, notary, noter, senator,

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sender, sentry, sonneteer, undoer, uniter, winder, winter, wonder. Entire, nether, sundry, under, untrue. **215**. Anthill, entail, handle, needle, nettle, noddle, noodle, sandal, soundhole, sundial, swindle, inutile, knightly, natal, nightly, synodal. **216**. Nightwatch, sandwich. Sandish. **217**. Antic, ending, haunting, hunting, indigo, knitting, nothing, undoing. Antique, nautic, sounding, synodic, undying, unheeding, winding. **218**. Cenotaph, native. **219**. Knee-deep. **220**. Annoyance, newness, nighness, oneness, wanness. **221**. Inanity, inuendo, noonday. Unhandy, unowned. **222**. Unknown. **224**. Nunnery. **225**. Son-in-law. **226**. Nonage, nuncio. **227**. Nooning. **231**. Enmity, inmate. Animate, unmade. **232**. Cinnamon, honey-moon. Inhuman. **234**. Namer. **235**. Animal, anomaly, enamel. **238**. Nymph. **240**. Nurse, sunrise. Onerous, sonorous. **241**. Inroad, seniority, snort. Inert, inward, onward, unhurt, unread, unready, unworthy, unwrought. **244**. Honourer, sneerer, snorer. Honorary. **245**. Snarl. Unreal, unruly. **246**. Energy. **247**. Anarchy, sneering, snoring. Unerring. **248**. Nerve. **249**. Wainrope. Unripe. **250**. Annals. Sinless, sunless. **251**. Inlet, nullity. Inlaid, unhealthy, unlaid, unwieldy. **254**. Nailer. Annular. **255**. Honolulu. **256**. Analogy. **257**. Weanling. Sunlike, unlike, unlucky, unwilling. **260**. Nauseous, sensuous, unjoyous. **261**. Unshed, unshod, unwashed. **262**. Ascension, engine, inhesion, nation, notion, sunshine. **264**. Censure, enjoyer, injury. **265**. Angel, essential, initial. Sensual, unusual. **267**. Enjoying, gnashing. **268**. Anchovy. **269**. Sonship. **270**.

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Onyx. Innocuous. **271**. Ingot, iniquity, snakeweed. Naked, uncouth, uncut, unquiet. **272**. Sanguine. **273**. Enigma, honeycomb, income. **274**. Inquiry, knocker, negro, Niagara, sinecure, sneaker. **275**. Knuckle. Cynical, unequal. **277**. Sneaking, synagogue. **280**. Invoice, novice. Envious, invious, niveous. **281**. Novity. Envied, unfed, unfit, unfought. **282**. Uneven. **283**. Infamy. **284**. Envier, knavery, snuffer. Unfair. **285**. Anvil, novel, snaffle. Naval, sinful. **286**. Knavish. **287**. Envying. **290**. Snaps. **291**. Nobody. Inept, nibbed, unbid, unbowed, unobeyed, unpaid. **292**. Henbane. **293**. Sunbeam. **294**. Neighbor, snapper. **295**. Nibble, noble, snowball. Assignable, knowable, nubile. **296**. Snappish. **297**. Nipping. **299**. Nabob. **300**. Almshouse, misuse. **301**. Homicide, mast, mist. Moist, most, mucid, musty. **302**. Amazon, mason, mizzen. **303**. Miasma, museum. **304**. Amuser, emissary, miser, misery, mouser, muser. **305**. Missal, missile, mousehole, muscle, mussel, muzzle. Measly. **306**. Massage, message, messuage. **307**. Mask, mosaic, mosque, music, musk. Amazing, amusing. **308**. Missive. Massive. **309**. Mazeppa. **310**. Madhouse, midsea. **311**. Humidity, method, mid-day. Immediate, mated, matted, mooted. **312**. Maiden, matin, mitten, mutiny, mutton, semitone. **313**. Madam, medium, sometime. **314**. Cemetery, cimeter, madder, matter, meteor, meter, metre, mitre, mooter, mother, motor, mutter, smatter, simitar, smiter, smother, symmetry. Amatory, mature. **315**. Medal, medley, metal, middle, model, module, muddle, mudwall. Motley, mutual. **316**. Modish.

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317. Emetic, mattock, meeting. **318**. Motive. **320**. Manes, means, menace, mince, summons. Immense, ominous. **321**. Almond, amenity, amount, assessment, cement, humanity, immunity, manhood, mantua, mind, mint, minuet, minute, monad, monody, month, mound, mount, womanhood. Maned, minute, moneyed, omened. **322**. Minion. **323**. Minim, minium, monome. **324**. Almoner, manner, manor, manure, miner, minor, seminary, summoner, yeomanry. **325**. Manual, menial. Hymenial, manly, womanly. **326**. Manage, menage. Manish, womanish. **327**. Mango, maniac, meaning, moaning. **330**. Malmsey. **331**. Home-made, maimed, mammoth. **332**. Mammon. **334**. Memoir, memory, mommory, mummery. **335**. Mammalia. **337**. Maiming, mimic. **339**. Mump. **340**. Mars, mayoress, mercy, morass, summer-house. Amorous, humorous, morose. **341**. Mart, merit, mirth, myriad. Married, smart. **342**. Marine, moor-hen, morn, murrain. **343**. Maw-worm. **344**. Hammerer, marrer, mirror. **345**. Marl, moral. Humoral, immoral, mural. **346**. Hemorrhage, march, marriage, marsh. Moorish. **347**. Mark, mooring, murk, simmering, smirk. **348**. Moravia. **350**. Malice. Emulous, seamless. **351**. Amulet. hamlet, humility, malady, mallet, malt, melody, mildew, mould, mulatto, mullet, omelet. Mild. **352**. Melon, million. Malign. **354**. Miller, smeller. Miliary. **355**. Mole-hill. May-lily. **356**. Militia. Mulish. **357**. Hemlock, milk, smelling, smiling. **360**. Images. **361**. Mashed, matched, smashed. **362**. Emission, emotion, machine, mission, motion, omission. **364**.

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Imagery, major, measure. **367**. Magic. **370**. Mucus, mug-house. **371**. Maggot. **372**. Mahogany. **374**. Haymaker, maker, mocker, mockery, smoker. Meagre. **375**. Muckhill. Muckle. **376**. Mawkish, muggish. **377**. Making, mocking, smoking. **379**. Magpie. **380**. Mavis. **381**. Mufti. **382**. Muffin, symphony. **384**. Mover. **387**. Moving. **390**. Embassy. Impious. **391**. Impiety, moppet, somebody, sympathy. Empty. **392**. Hempen. **393**. Wampum. **394**. Amber, embryo, empire, hamper, mappery, umpire, whimper. Impure. **395**. Assembly, cymbal, employ, maple, May-pole, sample, symbol. Amiable, ample, humble, mobile, simple. **396**. Ambush. Impish, mobbish. **397**. Iambic, May-bug. **400**. Recess. **401**. Arrest, receipt, reset, residue, rest, roast, roost, roset, rust, wrist. Roseate, worst. **402**. Arson, horizon, oraison, orison, raisin, reason, resin, rosin. **403**. Heroism, resume. Wearisome. **404**. Horse-hair, racer, raiser, razor, riser, rosary, rouser, sorcery. **405**. Wrestle. **406**. Horse shoe. **407**. Rescue, rising, risk. **409**. Horseboy, rasp, recipe. **410**. Hearts, hurds, radius, rights. Hazardous, riotous. **411**. Aridity. Cerated, erudite, redhot, rooted, serrated, sordid. **412**. Harridan, ratan, retina, retinue, warden. Certain, earthen, rotten, written. **413**. Erratum, redeem. **414**. Ardour, artery, asserter, awarder, hardware, hoarder, orator, oratory, oratorio, order, reader, rider, rioter, rudder, warder, writer. Rotary. **415**. Hurdle, ordeal, rathole, rattle, retail, riddle, ritual. Earthly, heartwhole, radial. **416**. Heritage, radish. Reddish. **417**. Heartache, heretic, hoarding, rating,

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ratting, reading, riding, writing. Arctic, erratic. **420**. Airiness, hairiness, harness, hoariness, rains, rawness, reins, ruins, soreness, wariness, weariness, wryness. Erroneous, ruinous. **421**. Aeronaut, errand, hornet, ironwood, orient, rant, rennet, rent, rind, round, serenade, warrant, warranty. Arrant, errant, horned. **422**. Renown, re-union. **423**. Surname. **424**. Ironware, runner, warrener. **425**. Renewal, runnel. **426**. Orange, ranch, range, syringe, wrench. **427**. Running, warning, yearning. **429**. Rainbow. **430**. Arms, Remus, surmise. Remiss. **431**. Armada, hermit, remedy, remit, warmth, wormwood. Remote. **432**. Ceremony, ermine, harmony, Roman, sermon. **434**. Armour, rammer, roamer, rumour. **435**. Armhole. **436**. Roomage, rummage. Romish. **437**. Remake, warming. **438**. Remove. **439**. Romp, rump. **440**. Arrears, war-horse. **441**. Rarity, reward. **442**. War-worn. **444**. Roarer. **445**. Auroral, rural. **446**. Arrearage. **447**. Hierarchy, rearing, re-hearing, roaring. **450**. Hairlace, release. Earless, hairless, heirless, wareless. **451**. Herald, reality, royalty, world. **452**. Sirloin. Cerulean. **453**. Heirloom, realm. **454**. Railer, raillery, roller, ruler. **456**. Horologe, relish. **457**. Hireling, railing, rallying, relic, rolling, warlock, yearling. Warlike, whirling. **458**. Relief, werewolf. **459**. Harelip. **460**. Riches. Righteous. **461**. Earshot. Rigid, wretched. **462**. Assertion, irrision, oration, origin, region, surgeon, urchin. **463**. Regime. **464**. Archer, archery, rasher, searcher. **467**. Raging. **468**. Archive. **469**. Worship. **470**. Circus, rags, workhouse. Irriguous.

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471. Arcade, circuit, ergot, racket, rocket, surrogate, workday. Erect, ragged, ricketty, rugged, wrecked. **472**. Hurricane, organ, racoon. **473**. Requiem. **474**. Arguer, raker, rigger, rigor, ringer, rocker, roguery, rookery, worker, wringer. **475**. Auricle, circle, oracle, recall, recoil, regalia. Heroical, regal. **476**. Rakish, roguish. **477**. Raking, rigging, working. **480**. Orifice, refuse, service, surface. **481**. Harefoot, raft, rift, rivet, surfeit. Reft. **482**. Orphan, raven, revenue, ruffian. **483**. Seraphim. **484**. Referee, revery, reviewer, river, rover, surveyor, warfare. **485**. Arrival, raffle, revel, rifle, rival, ruffle. Ireful, rueful, servile. **486**. Ravage, refuge, refugee, wharfage. **487**. Raving, surveying. Horrific, seraphic. **490**. Rebus, repose. Herbous. **491**. Acerbity, orbit, rabbit, rebate, repute. Orbed, rabid, rapid, rapt, ribbed, warped. **492**. Arabian, European, harpoon, rabbin, rapine, ribbon, robin. Urban. **494**. Arbour, harbour, harper, rapier, rapper, reaper, repair, robber, robbery, ropery, rubber, usurper, wrapper. **495**. Cerebel, hairbell, rabble, rebel, repeal, reply, ripple, warble. Arable, errable, herbal, horrible. **496**. Herbage, rubbish. **497**. Reaping, rebuke, roebuck, robbing. Arabic. **498**. Rebuff. **500**. Losses. **501**. Lawsuit, list. Illicit, last, least, lucid, lusty, wellset. **502**. Lesson. Elysian. **503**. Lyceum. Wholesome. **504**. Lazar, leaser, loser, ulcer. Illusory. **505**. Lazuli, wholesale. **507**. Woolsack. **508**. Elusive, illusive. **509**. Lisp. **510**. Lattice, lettuce, lights. **511**. Lady-day, solidity, solitude. **512**. Latin, litany, sultan, sultana. Latten, leaden, well-done. **514**. Alder, altar,

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elder, halter, holder, holy-water, ladder, lather, leader, leather, letter, lighter, litter, loader, lottery, saluter, slater, slaughter, slider, solder, solitaire, wall-tree, yielder. Later, latter, leathery, salutary, solitary, sultry. **515**. Ladle, salad-oil, swallow-tail. Little. **516**. Latish, loutish, oldish, saltish. **517**. Lading, leading, loathing, slighting, well-doing, yielding. **520**. Alliance, allowance, holiness, hollowness, illness, lance, lens, lioness, lowness, lunacy, oiliness, sallowness, silence, silliness, slowness, slyness, sullenness, wiliness, yellowness. **521**. Holland, island, land, landau, lenity, lent, linnet, lint, lunette, walnut. Lent, salient, silent, slant. **522**. Linen. Leonine. **524**. Linear, lunar. **525**. Lineal, lonely. **526**. Launch, lineage, lunch. **527**. Lining. **530**. Limous. **531**. Helmet, limit. Limbed. **532**. Alimony, lamina, layman, lemon, oilman. **538**. Lymph. **539**. Lamp, limbo, limp, lump. **540**. Walrus. **541**. Celerity, hilarity, lard, laureate, leeward, lord, sailyard, wheelwright. Alert, lurid. **543**. Alarm. **544**. Allurer. **545**. Laurel. **546**. Cellarage, larch, lurch. Large. **547**. Lark, wheelwork. Alluring, lowering. **548**. Larva. **550**. Lawless. **551**. Loyalty. Lilied. **554**. Cellular. **557**. Ill-luck, soliloquy. **559**. Lullaby. **560**. Lieges. Luscious. **561**. Latchet. **562**. Allusion, elation, elision, elusion, illusion, legion, lotion, solution. **563**. Elysium, eulogium. **564**. Alleger, lasher, ledger, leisure, lodger, soldier, soldiery, well-wisher. **567**. Lodging, logic. **569**. Oilshop. **570**. Legacy. Lax. **571**. Legate, legatee, liquid, locket, lock-out, logwood, lookout. Elect, leagued, select. **572**. Welkin. Silken. **573**. Welcome.

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574. Allegory, lager, lagger, laquer, leaguer, liquor, locker, looker, lucre. **575**. Alcohol, alkali. Illegal, laical, legal, likely, local. **576**. Leakage, luggage. Sluggish. **577**. Liking, lingo, link, longing, looking. **578**. Alcove. **579**. Lock-up. **580**. Selfwise. **581**. Left, Levite, levity, lift, loft. Leaved, livid. **582**. Leaven, sloven. Silvan. **583**. Alluvium. **584**. Laugher, laver, lever, liver, livery, livre, loafer, lover, salver, silver, slaver, slavery, sulphur, welfare. Life-weary. **585**. Level, self-will. Alluvial, lawful, lively, lovely, wailful, wilful. **586**. Salvage, selvage. Lavish, selfish, slavish, wolfish. **587**. Laughing, living, loving. **589**. Life-buoy. **590**. Alps, heel-piece, lapse, syllabus. **591**. Halibut, lappet. Lipped, lopped. **592**. Lupine, whalebone. Alpine, lupine. **593**. Album. **594**. Aleberry, helper, labor, leaper, leapyear, leper, lopper, lubber, sleeper, slipper, wheelbarrow. Slippery. **595**. Label, libel, loophole, syllable. Allowable, labial, liable, saleable, soluble. **597**. Helping, lapwing, well-being, woolpack, yelping. **599**. Sillabub. **601**. Chest, gist, jest, Jesuit, joist. Chaste, just. **602**. Chosen. **604**. Chaser, chasseur, chooser. **605**. Chisel. **607**. Chasing, choosing. **611**. Jaded, shaded, sheathed. **614**. Chatter, cheater, chider, shatter, shedder, shooter, shouter, shudder, shutter, watchtower. **615**. Chattel, schedule, shuttle. **616**. Jadish. **617**. Chatting, cheating, chiding, shadowing, shedding, sheeting, shooting, shutting. Judaic. **619**. Washtub. **620**. Agency, chance, genius, hugeness, sageness, shyness. **621**. Agent, chant, gent, giant, jaunt, joint, junto. **622**. Genuine. **624**. China-

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ware, joiner, junior. **625**. Channel. Genial. **626**. Change. **627**. Chaining, shining, shunning. **628**. Geneva. **632**. Chimney, gemini, hushmoney, watchman. **634**. Shammer. **637**. Chiming. **639**. Jump. **640**. Jersey, shares, shears, sheers. Usurious. **641**. Charade, chariot, charity, chart, shirt, shred, shroud, watchword. Assured, short, shrewd. **642**. Churn, journey, shrine, sojourn. Shorn. **643**. Charm, germ. **644**. Assurer, jeerer, juror, sharer, shearer, usurer. **645**. Churl. Shrill. **646**. Charge, church. **647**. Chairing, cheering, jarring, jerk, sharing, shark, shearing, shriek, shrug. **648**. Sheriff, shrive. **649**. Cherub, chirp, chirrup, shrub. Sharp. **650**. Chalice, jealousy. Jealous, joyless. **651**. Agility, child, jilt, jollity, jolt, shield, watchlight. **654**. Jailer, jeweller. **656**. Geology. **657**. Shilling. **658**. Shelf. Shelvy. **659**. Jalap, julep, shallop. **662**. Association. Jejune. **667**. Judging. **670**. Jackass, watchcase. Jocose. **671**. Chickweed, jackdaw, jacket, she-goat. **672**. Chicane, chicken. **674**. Checker, jogger, joker, shaker, sugar. **675**. Chuckle, jackal, juggle, shackle. **677**. Chink, chunk, junk, shaking. **680**. Chives, sheaves. **681**. Shaft. **684**. Achiever, chafer, chaffer, shaver, shiver, shover. **685**. Shovel, shuffle. Jovial, joyful, watchful, wishful. **687**. Shaving. **690**. Chophouse, gipsy. **691**. Gibbet. Shaped. **692**. Japan. **694**. Giber, jabber, jobber. **695**. Chapel, jubilee. Shapely, sociable. **696**. Hotch-potch. Sheepish. **697**. Chopping, sheep-hook, sheep-walk, shipping. **699**. Ship-boy. **700**. Access, axis, excess, excise, gas-house, success. **701**. Cast, caste, cast-away, coast,

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cost, exit, gazette, ghost, guest, gusset, gust, gusto, hogshead, hogsty, oxide, quest, sagacity. Aghast, august. **702**. Cousin, gazon. Waxen. **703**. Axiom, chasm, whiggism. **704**. Accuser, gazer, guesser, kisser. **705**. Axil, axle, exile. **706**. Hogswash. **707**. Casing, cask, cassock, guessing, kissing. **708**. Cassavi, exuviæ. Cohesive. **709**. Gasp, gossip. **710**. Cadiz, cates, cats-eye, goddess, goods. **711**. Cadet. **712**. Cotton, kidney, kitten. **713**. Academy, hecatomb, sowing-time. **714**. Actor, actuary, catarrh, cautery, cutter, equator, gaiter, gaudery, gather, getter, guider, guitar, gutter, quoter, sectary. **715**. Cattle, good-will, kettle, scuttle, skittle, wagtail. Goodly. **716**. Cottage, guidage. Goatish, skittish. **717**. Acting, coating, cutting, getting. Acquatic, chaotic, goading, Gothic, hectic. **718**. Caitiff, cut-off, octave. Active. **719**. Good-by. **720**. Coyness, gayness, hooknose, quince, quinsy, sequence, sickness, weakness. Agneous. **721**. Account, aconite, candy, cant, canto, count, county, signet, squint. Gained, gaunt, gowned, kind, quaint, scant, scanty, skinned. **722**. Cannon, guinea-hen. Canine. **723**. Economy. **724**. Canary, coiner, gainer, gunner, gunnery, skinner, waggoner. **725**. Canal, kennel, signal. Signal. **726**. Coinage. **727**. Awakening, cunning. **728**. Convoy. **729**. Canopy. **730**. Gummous. **731**. Comedy, comet, comity, committee, gamut. **732**. Acumen, caiman, common, commune, gammon, hangman. **734**. Camera, comer, schemer, scummer, skimmer, sycamore. **735**. Camel. Comely. **736**. Squeamish. **737**. Cammock, coming, gaming. Comic, scheming. **739**. Camp, gimp. **740**. Accuracy, caress, caries, carouse,

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chorus, co-heiress, course, craze, crease, cress, cross, crossway, cruise, cuirass, curacy, curse, egress, goers, grass, grease, grouse, kersey, secrecy. Carious, coarse, cross, curious, gross, scarce. **741**. Accord, carat, card, carrot, cart, chord, cohort, cord, court, coward, cowherd, crate, creed, crowd, cruet, curate, curd, escort, garret, girth, gourd, grate, greed, grit, groat, grotto, growth, guard, hogherd, quart, quarto, secret, security, skirt. Accurate, acrid, awkward, crude, curt, great, haggard, sacred, scared, seagirt. **742**. Acorn, cairn, carrion, crane, crayon, corn, crone, crony, crown, grain, grin, groan, hanger-on, scorn, screen. **743**. Cream, crime, crumb, grime, groom, quorum, scream. Grim, grum. **744**. Career, carrier, courier, crier, curer, currier, grower, scourer, securer, swaggerer. **745**. Carle, carol, coral, crawl, curl, girl, growl, gruel, kreel, quarrel, scrawl, scroll, squirrel. Choral, cruel. **746**. Carriage, courage, crash, crush, gorge, grudge, scourge, scratch, screech. Currish, gairish, grayish. **747**. Cargo, cork, crack, crag, creek, croak, crook, crying, gearing, Greek, growing, kirk, quirk, scouring, swaggering. Scraggy. **748**. Carafe, curfew, curve, grave, gravy, grief, groove, grove, scarf, scurvy. Grave, gruff. **749**. Carboy, carp, crab, crape, crib, crop, croup, curb, garb, grape, grip, gripe, group, hockherb, scrap, scrape, scribe, scrip, scrub. **750**. Calice, class, clause, close, coals, gallows, gills, glass, gloss, school-house. Callous, close. **751**. Calotte, clod, clot, cloth, cloud, clout, cold, colt, eaglet, equality, galiot, gilt, glade, glut, guild, guilt, gullet, kilt, quality, quilt, scald, schoolday, scold, skillet, skylight. Eagle-eyed, glad, occult, scaled, skilled,

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squalid. **752**. Clan, clown, colon, colony, cyclone, galleon, gallon, galloon, glean, glen, scullion. Aquiline, clean. **753**. Acclaim, claim, clam, clime, column, gleam, gloom. Clammy, glum. **754**. Caller, choler, collar, collier, colliery, color, cooler, culler, gallery, glare, glory, gluer, haggler, higgler, killer, ogler, queller, scholar, sculler, scullery, squaller, squalor. Clear, ocular, secular. **756**. Calash, clash, college, eclogue, galoche. Clayish, glueish. **757**. Calico, calling, clang, click, clique, cloak, clock, clog, colic, colleague, colloquy, cooling, glowing, scaling, suckling. Gælic, gallic. **758**. Caliph, cleff, cliff, clove, glove. **759**. Clip, club, collop, gallop, glebe, globe, gulp, scallop, scalp, schoolboy. Glib. **760**. Coach-house. Cautious, gaseous, sagacious. **761**. Cow-shed. **762**. Action, auction, caution, cohesion, cushion, equation, gudgeon, section, suction. **764**. Cashier. **765**. Eggshell. Casual. **767**. Gushing. **770**. Caucus. **771**. Cockade, cockatoo, coquette. **772**. Cockney, cocoon. **773**. Gingham. **774**. Anchor, calker, cookery, hunger, kicker, quackery, quaker, squeaker. **775**. Angle, ankle, cackle, cockle, giggle, goggle, ingle. Coequal, single. **777**. Cooking, quaking, squeaking. **779**. Syncope. **780**. Coffee-house. **781**. Caveat, cavity, gift. **782**. Coffin. **784**. Coffer, coiffure, cougher, cover, gaffer, giver, quaffer, quaver, quiver, scoffer. **785**. Cavil, scuffle. Wakeful. **787**. Giving, scoffing. **788**. Qui-vive. **790**. Coppice, copse, equipose. Copious. **791**. Capot, cubit, Cupid. Capped. **792**. Cabin, capon, cupon, gabion. **794**. Caper, cooper, copier, copper, cupper, gaper, keeper, occupier, scupper, skipper.

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795. Cabal, cable, cobble, couple, cupola, gabble, gable, quibble, squabble. Equable. **796**. Cabbage, equipage. **797**. Coping, gaping. **799**. Cobweb. **800**. Phasis. **801**. Fast, faucet, feast, fist, offset, sophist, vest, visit, vista. Fast, fusty, vast. **802**. Fascine. **803**. Phasm, sophism. **804**. Officer, viceroy, visor. **805**. Fossil, vassal, vessel. Facile, fissile. **806**. Visage. **807**. Facing, physic. **808**. Effusive, evasive. **810**. Fatuous, featuous. **811**. Avidity, fatuity, fit-out, viduity. Fated, feted, half-dead. **812**. Phaeton. **813**. Fathom. **814**. Avoider, father, feature, feeder, fetter, fighter, fitter, fodder, future, sifter, votary, voter, wafter. **815**. Fiddle, fuddle. Fatal feudal, futile, vital. **816**. Fetish, waftage. **817**. Fading, fatigue, feeding, fighting, fitting, footing, sifting. **818**. Votive. **819**. Footboy. **820**. Evenness, fancy, fence, finesse, heaviness, offence, safeness, vainness. Veinous, vinous. **821**. Affinity, event, feint, fiend, font, fount, fund, vanity, vaunt, vendee, vent, viand. Faint, feigned, finite, finned, fond, veined. **823**. Venom. **824**. Fanner, fawner, feigner, finer, finery, vineer. **825**. Funnel, vanilla. Final, heavenly, venal. **826**. Finish. Fennish, Finnish. **827**. Evening, fawning, fining. **830**. Famous, fumous. **831**. Vomit. Famed, fumid. **832**. Famine, halfmoon. **834**. Ephemera. **835**. Family, female. **837**. Vomica. **839**. Vamp. **840**. Avarice, farce, force, frieze, furze, pharisee, pharos, phrase, verse. Averse, ferreous, fierce, frowsy, furious, ovarious, various. **841**. Effort, fairday, ferity, ferret, firewood, ford, fort, fraud, freight, fret, fright, froth, fruit, severity, variety, verity, virtu, virtue. Feared, frayed, freed, fur-

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rowed, overt, varied. **842**. Fern, frown, sovereign. Ferine, foreign. **843**. Farm, firm, form, forum, frame. Firm. **844**. Farrier, firer, friar, friary, furrier, offerer, seafarer, sufferer, waverer, wayfarer. Overweary. **845**. Farewell, ferrule, ferula, freewill, frill, furlough. Frail, several, virile. **846**. Average, ferriage, forage, forge, overjoy, suffrage, verge. Fresh. **847**. Fairing, firing, fork, freak, frock, frog, frying, offering, suffering, virago, wavering. Overweak, seafaring, wayfaring. **849**. Overpay, verb. **850**. Fallacy, falls, fells, fleece, floss. False, viewless, villous. **851**. Civility, fault, fealty, felt, field, fillet, fold, flat, fleet, flight, float, flood, fluid, flute, vault, violet, volt, volute. Afloat, fleet, full-eyed, valid. **852**. Civilian, felon, felony, villain, villainy, violin. Feline, flown, highflown. **853**. Film, flame, vellum, volume. **854**. Failure, feeler, fellow-heir, filler, flare, flayer, flier, floor, flour, flower, flurry, foiler, follower, foolery, fowler, fuller, highflier, valour, valuer, volery. **855**. Civil-law, flail. Filial. **856**. Flash, flesh, flush, foliage, village. Foolish. **857**. Failing, falling, feeling, felling, fellucca, filling, flag, flake, flaying, fling, flock, flowing, following, fowling, valueing. Availing. **858**. Effluvia, valve. **859**. Flap. Flabby. **860**. Officious, vicious, vitious. **861**. Fidget, offshoot. **862**. Effusion, evasion, fashion, fusion, ovation, suffusion, vision. **864**. Fisher, fishery, fissure, savagery, vizier, voucher. **865**. Official, vigil. Visual. **867**. Fishhook, fishing. **868**. Fish-wife. **870**. Efficacy, focus, fox. Vacuous. **871**. Effect, fact, faggot, vacuity. Fanged. **872**. Half-guinea. **873**. Vacuum. **874**. Figure, vagary, vicar, vigour. **875**. Fickle,

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focal, vocal. **881**. Vivid. **884**. Favour, feoffer, fever. **891**. Vapid. **892**. Half-penny. **894**. Fibber, fibre, foppery, vapour, viper. **895**. Fable, foible. Affable, avowable, effable. **896**. Foppish. **900**. Abscess, spices. **901**. Beast, behest, boast, bust, episode, obesity, opacity, paucity, paste, pasty, pest, post, subsidy. Best, opposite, past. **902**. Basin, bassoon, bison, poison. **903**. Besom, bosom, spasm. **904**. Abuser, appeaser, opposer, pacer, passer, pauser, piecer, poser, spicer, spicery, supposer. **905**. Apostle, epistle, espousal, puzzle. **906**. Passage. **907**. Appeasing, buzzing, passing. **908**. Abusive, passive. **909**. Bushy. **910**. Abatis, beads, bodice, pathos, poetess. Beauteous, obtuse, piteous. **911**. Appetite, epithet, potato. Booted, spotted. **912**. Baton, batten, botany, button, paten, subdean. **913**. Bottom, epitome. **914**. Abettor, abider, bather, batter, battery, bay-tree, beater, bidder, biter, bother, butter, buttery, obituary, padder, patter, pewter, poetry, potter, pottery, putter, powder, sceptre, spider, sputter, subduer. Better, bitter. **915**. Battle, beadle, beetle, bottle, hospital, paddle, petal, puddle. Bodily, habitual, pedal. **916**. Pottage, potash. Pettish. **917**. Abiding, bating, beating, bedding, beheading, betting, bidding, biting, budding, buttock, optic, paddock, pothook, pouting, pudding. Poetic. **918**. Epitaph. **920**. Bones, bounce, happiness, openness, panacea, pansy, pence, pinnace, sapience, suspense. Penny-wise, spinous. **921**. Band, bayonet, bay-window, bend, bent, bond, bonnet, bound, bounty, husband, paint, pant, point, pond, pound. Bandy, bent, buoyant, pent, sapient. **922**. Bunion, opinion, pennon, pinion. Benign.

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923. By-name. **924**. Banner, opener, pannier, penner, penury, piner, pinner, pioneer, spinner. **925**, Hobnail, panel, pinhole, spaniel. Biennial, penal, pineal, spinal. **926**. Bench, bunch, paunch, pinch, punch, spinage, sponge. Spanish. **927**. Bannock, opening, panic, pining, spawning, spinning. **930**. Pumice. **931**. Pomade. **932**. Bowman. **934**. Palmer. **935**. Pommel. **937**. Beaming. **939**. Bamboo, bump, pomp, pump. **940**. Brace, brass, boreas, breeze, browse, bruise, cypress, hobby-horse, peeress, piracy, praise, press, price, prize, prose, prowess, purse, weepers. Asperous, porous, spruce, spurious, uberous. **941**. Asperity, bard, beard, bird, birth, board, brad, braid, brat, bread, breath, breed, bride, brood, broth, brute, by-road, by-word, parade, parity, parody, parrot, part, party, period, pirate, port, prate, pride, prude, purity, sobriety, spirit, sport, sprat, sprite, sprout, spurt, support, uberty. Bright, broad, pert, pretty, proud, separate, sparred, spread, spurred, upright, upward. **942**. Apron, barn, baron, barony, bourn, brain, bran, brine, burn, prawn, prune, sprain. Auburn, barren, born, brawny, brown, highborn, prone. **943**. Barm, brim, broom, prime, sperm. Prim, supreme. **944**. Abhorrer, appearer, barrier, bearer, borer, borrower, brayer, brewer, brewery, briar, burier, parer, pourer, prayer, preyer, prier, prior, priory, sparer, spurrer, superior, uproar, whisperer. **945**. Apparel, barrel, barley, brawl, broil, burial, parley, parole, pearl, peril, prowl. Boreal, burly, puerile, spiral. **946**. Approach, barge, birch, breach, brewage, brooch, brush, parish, peerage, perch, porch, porridge. Bearish, boorish, poorish,

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947. Bark, bearing, boring, borrowing, brag, brake, brick, brogue, brook, burying, pairing, paring, park, periwig, peruke, pork, purring, sparring, spark, spring. Sparing. **948**. Bravo, brief, proof. Brave. **949**. Barb, bribe, probe, prop, suburb. Superb. **950**. Applause, blaze, bliss, bellows, palace, palsy, place, playhouse, police, policy, pulse, splice. Bilious, blowsy, hapless, hopeless, sapless. **951**. Ability, ballad, ballot, belt, blade, bleat, blight, blood, blot, bolt, bullet, epaulet, palate, pallet, pallette, pellet, pelt, pilot, plaid, plait, plat, plate, play-day, plight, plot, polity, poult, pullet, split. Bald, blithe, bold, oblate, pallid, polite. **952**. Balloon, bowline, bullion, plain, plan, plane. Highblown. **953**. Blame, bloom, plum, plume. Sublime. **954**. Bawler, blower, blur, boiler, bowler, peeler, piler, pillar, pillory, player, poller, puller, speller, spoiler. Bleary, polar. **955**. Pale-ale. **956**. Apology, belch, bilge, blush, pillage, plash, pledge, plush, polish, splash, whip-lash. Bluish, palish. **957**. Bailiwick, bawling, bewailing, block, blowing. boiling, bowling, bulk, bullock, epilogue, obloquy, plague, plowing, pluck, plug, sapling, spelling, spoiling. Appalling, black, bleak, oblique. **958**. Bailiff, belief, pelf. Bluff. **959**. Bulb, pulp. **960**. Species. Auspicious, spacious, specious. **961**. Budget, upshot. **962**. Option, passion, pigeon, potion, suspicion. Beechen. **963**. Hypogeum. **964**. Butcher, patcher, pitcher, poacher, pusher. **965**. Bushel. Especial, special. **967**. Pea-chick, pushing. **969**. Bishop. **970**. Apex, bake-house, box. **971**. Aspect, bigot, bucket, packet, pact, pagoda, picket, pict, pocket, spigot, ubiquity. Picked,

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piqued. **972**. Bacon, beacon, biggin, pagan. Bygone. **973**. Bigamy, pigmy. **974**. Baker, beggar, beggary, epicure, packer, pecker, picker, poker, speaker. **975**. Boggle, buckle, bugle, bunghole, pickle. **976**. Baggage. Bookish. **977**. Baking, bank, booking, packing, peacock, speaking. **979**. Bugaboo, back-pay. **980**. Obvious. **981**. Pivot. **982**. Buffoon. Epiphany, spavin. **984**. Beaver, behaviour, buffer, pavier, puffer. **985**. Baffle, bevel, buffalo. Hopeful. **986**. Peevish. **987**. Behaving, bivouac, paving, puffing. **990**. Papacy, papoose. **991**. Biped, by-path, puppet, spyboat. **992**. Baboon, bobbin, pippin, subpoena. **994**. Bibber, paper, pauper, peeper, pepper, piper, popery. **995**. Babble, Babel, bawble, bible, bubble, pebble, peep-hole, people, pupil. Papal, payable. **996**. Babyish. **997**. Bobwig, piping. **1,000**. Dioceses, diseases.

From this point, onward, each set of words is not marked with its respective number but, while, as before, the words are arranged in consecutive order, the numbers are given by fifties only.

1001. Deceased, diseased, disused. Diocesan. Atticism, stoicism, witticism. Decisory. Decisive. Deciduous. Desuetude: decided, testate, toasted, twisted. Destiny, disdain, whetstone. Day-star, decider, duster, taster, tester, toaster, twister. Side-saddle. Distich. Deciding, tasting, testing, toasting, twisting: atheistic, deistic, theistic. Distaff. Decency, hideousness, odiousness. Dissent: decent, designed, disowned. Disunion. Designer, dishonor. Decennial. Designing, disowning. Dismayed. Headsman, seedsman. Decimal, dismal. Dismaying. Desert, dessert. Desirer. **1051**. Docility: dazzled, desolate,

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tasseled. Disloyal. Dislike: dazzling. Decession, decision. Discus: discous. Disquiet: tusked. Tuscany. Duskish. Tasking. Deceived, disavowed, satisfied. Deceiver, satisfier. Disavowal. Deceiving, disavowing, satisfying. Despot, dispute: disobeyed. Despair. Disciple: adducible. Dispatch. Disobeying. **1101**. Dead-set. Statist. Duodecimo, idiotism. Deducing. Deducive. Tete-a-tete. Tide-waiter. Dietetic. Deadness, doughtiness, sedateness, steadiness, stoutness, tidiness, tightness, Titans. Student. Detainer. Detaining, diatonic, Teutonic. Titmouse. Head-dress, tatters, tutoress. Dotard. Stateroom. Stutterer, withdrawer. Editorial, withdrawal. Tutorage. Stuttering, tittering, twittering, withdrawing: theatric. Dewdrop, diatribe. Deathless, toothless. **1151**. Theodolite, totality: detailed, titled. Dawdler, tattler, titulary: titular, tutelary. Tutelage. Detailing, tattling: death-like. Dead-shot: detached. Detaching. Dutiful, thoughtful. Tadpole, tea-table: tithable. Tithe-paying. **1201**. Aguncity, density, dynasty. Denizen. Heathenism. Dancer, tonsor. Tinsel, tonsil, utensil: tensile. Dancing. Ostensive. Hottentot, identity: daunted, dented, stinted, stunted, tainted. Tontine. Addendum. Stentor, stander, tender, thunder, tinder: sedentary. Dental. Authentic, tainting, taunting. Stoniness, tenancy. Tenant. Tanyard. Itinerary. Stonework. Stainless. **1251**. Tunneled. Ethnology. Tenacious. Attention, donation, dungeon, tension. Danger, tonsure. Astonishing, tinging, twinging. Township. Stone-quarry. Ethnical, satanical. Downfall. Deniable, tenable. **1301**. Atomist, doomsday, utmost. Damsel, domicile. Timidity, tomtit. Automaton. Diameter,

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estimator. Automatic, idiomatic. Dimness, dominoes. Adamant, demand, diamond, sediment. Autumnal. Demoniac. Steam-horse: timorous. Demerit, temerity: admired. Time-worn. Admirer, stammerer. Admiral. Stammering. Stimulus, tumulus: stemless. **1351**. Tumult. Tumular. Etymology. Damages. Damaged. Admission, demijohn, demission, estimation. Damaging. Steamship. Demigod. Demagogue: stomachic. Dumps, time-piece. Stampede, steamboat: stamped. Tympan. Damper, stamper, temper, timber. Dimple, temple, thimble, tumble: estimable, tamable. Dampish. Damping, dumping, tamping, thumping. **1401**. Satirist, theorist, thrust, tourist, trust, trustee, tryst: dressed, thirsty, trussed, trusty. Treason. Toryism, truism: tiresome. Tracer, tracery. Drizzle: dorsal. Asterisk. Derisive. Straits, tortoise, treatise: tortuous. Dreaded, iterated, saturated, thwarted, water-tight. Eider-down, tartan: trodden. Stratum. Derider, out-rider, tartar, territory, trader, traitor, treader, trotter. Throttle, turtle. Strategy: tartish. Darting, deriding, eider-duck, trading, treating. Stereotype. Adherence, dearness, durance, trance. Adherent, eternity, hydrant, strand, tornado, truant, tyrant: adorned, drained, drowned, strained, trained. Trunnion: Saturnine. Astronomy. Darner, strainer, trainer, turner. Darnel, saturnalia, train-oil: diurnal, eternal. Drainage, trench: strange. Adorning, darning, draining, training, turning: histrionic. Turnip. Dormouse, terms. Dairy-maid, door-mat: trimmed. Drayman, waterman. Dreamer, streamer, tremor, trimmer. Turmoil: thermal. Dreaming, strumming, trimming: streaming. Triumph. Tramp,

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trump. Water-rat: hitherward. Tyrolese: dowerless, starless, tearless. **1451**. Starlight, sterility: thrilled. Waterline. Stroller, trawler. Water-lily. Astrology. Darling, drawling, strolling: hydraulic, sterling, thrilling. True-love. Atrocious, outrageous. Tragedy: dry-shod, outraged, starched, thrashed. Adoration, derision, duration, hydrogen, sturgeon. Starcher, thresher, treasure, treasury: tertiary. Tarshish. Starching, thrashing, threshing: tragic. Authorship. Dregs, staircase, thorax, turquoise. Target, tract: direct, drugged, streaked, strict, tricked. Dragon, dragoon: stricken. Striker, trickery, trigger. Treacle. Historical, satirical. Darkish, Turkish. Drink, trunk, weather-cock. Draught, drift, thrift: starved. Driver, striver. Drivel, travel, trefoil, trifle, waterfall, waterfowl: direful, tearful, trivial. Star-fish: dwarfish. Starving, striving, thriving. Hydrophobia. Dropsy, troops. Torpedo, tribute, tripod, turbot: striped, stripped, torpid, turbid. Terrapin, tribune, turban. Draper, drapery, strawberry, torpor, trooper. Strawbail, trouble: adorable, durable, terrible, treble, triple. Drawback, tropic: dripping, drooping. **1501**. Duelist: dulcet, dullest, tallest. Idealism: toilsome. Idolizer: delusory. Delusive. Stolidity: deluded, dilated, diluted. Deluder, idolater, idolatry: dilatory. Tilting: athletic, deluding. Dullness, idleness, stillness, tallness. Headland, talent. Talmud. Dolman. Tailoress: delirious, dolorous. Steelyard. Delirium. Tailoring, wood-lark. **1551**. Delicious. Deluged. Adulation, delusion, dilution, theoloigan. Osteologer. Delicacy, italics. Delegate, delicate, dialect, toll-gate. Stall-fed. Dolphin: diluvian. Diluvium. Delivery,

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delver. Diluvial, doleful. Delving. Tolbooth. Steel-pen. Toll-bar. **1601**. Digest, tea-chest. Digits. Dishwater. Digital. Sottishness. Stationer, stationery: stationary. Dutchman. Stage-road. **1651**. Stage-line. Dish-washer. Stage-coach. Dishabille: teachable. **1701**. Outcast, text: thickest, thickset. Tocsin. Taxer. Taxing. Educated, stockaded, thick-headed. Doctor, educator. Tea-kettle. Decoy-duck: educating. Seductive, talkative. Stickiness, thickness. Thickened. Thickening: technic. Decrease, staggers, theocracy, tigress: decorous. Autocrat, dockyard. Seed-corn, sweet-corn. Decorum, diagram. Hod-carrier, outcrier. Doggerel. Tigerish. Autography. **1751**. Tickled. Decline. Stickler, tickler. Ticklish. Decalogue, tickling. Hoodwinked. Decagon. Thinker. Tinkle. Thinking. Dog-fight. Dogfish. **1801**. Deficit: defaced. Adviser, defacer, deviser, diffuser, divisor: advisory. Advising, defacing, devising, diffusing. Defeated, devoted, divided, tufted. Stevedore, divider. Dovetail. Dividing. Advance, dauphiness, deafness, defiance, stiffness. Advent, divinity: defined, definite. Definer, diviner. Defining. Defamed. Defamer. Defaming. Divorce: adverse, diverse. Tavern. Devourer. Deferring, defraying, devouring. Adverb. **1851**. Stifled. Defiler. Devilish. Defiling: dove-like. Deviation, devotion, diffusion, division. Advocacy. Advocate, defect, dove-cot. **1901**. Deposit, outpost: debased, deepest, deposed. Diapason, stepson. Debaser, deposer. Debasing, deposing. Stupidity, tepidity: adapted, adopted, debated, deputed. Adopter, debater. Adapting, adopting, debating, debiting. Deepness, steepness. Hat-band,

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stipend: deepened, hidebound. Deepening. Tuberose: tuberous. Stubborn. Sweet-briar. Day-break, outpouring: tapering. **1951**. Debility, doublet, stability, tablet: dappled, doubled. Doubloon. Diploma. Tippler: tabular, tubular. Deploying, tippling. Stable-boy. Debauched. Adaption, adoption. Debauchery. Woodpecker. Topical, typical. Stopcock. Stupefier. Stupefying.

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ONE HUNDRED IMPORTANT INVENTIONS, DISCOVERIES, ETC.

1.	Air-guns invented	1646
2.	Air pump invented by Otto von Guericke	1654
3.	Algebra introduced into Europe by the Saracens	1412
4.	Almanacs first printed at Buda	1470
5.	Animal electricity discovered by Galvani	1791
6.	Argand lamp invented	1782
7.	Art of printing invented by Faust and Guttenburg	1441
8.	Astronomical observatory built in Europe at Cassel	1561
9.	Auction sales started in England by Elisha Yale	1700
10.	Banks established in Europe, at Venice	1157
11.	Barometer invented by Torricelli	1643
12.	Bayonets first made at Bayonne, France	1670
13.	Bombs invented	1495
14.	Camera obscura constructed by Roger Bacon	1297
15.	Canals first made in Britain	1134
16.	Cannons first made by the French	1340
17.	Caoutchouc or India rubber first brought to Europe	1730
18.	Cartes de visites first taken at Nice	1857
19.	Casts in plaster first made, at Florence	1470
20.	Chain Bridges first constructed	1741
21.	Chain-shot invented by Admiral De Witt	1666
22.	Chemistry introduced into Europe by the Moors	1150
23.	Chimnies first used in Europe	1200
24.	China Porcelain introduced into England	1531
25.	Chocolate introduced into Europe from Mexico	1520
26.	Chronometer invented by Harrison	1764
27.	Circular saws first made	1816
28.	Circulation of the blood discovered by Harvey	1619
29.	Coal first dug in England near Newcastle	1234
30.	Coats of arms and armorial bearings first used	1200
31.	Coffee introduced into Holland from Arabia	1616
32.	Colleges first established in Europe, at Paris	1215
33.	Copper mines first discovered in Sweden	1396
34.	Cork first brought to England	1690
35.	Cotton gin invented by Whitney	1793
36.	Crayons first used in France	1422
37.	Curfew bell established by William the Conqueror	1068
38.	Decimal arithmetic invented	1482
39.	Diamond mines of Golconda discovered	1534
40.	Electric light discovered by Davy	1813
41.	Electric machine constructed by Otto von Guericke	1647
42.	Electrotype process first employed	1850

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43.	Engraving on wood begun in Europe	1400
44.	Galileo constructed his first telescope	1610
45.	Gas first used to light streets in the U. S.-at Balto.	1821
46.	Gold first coined in England	1257
47.	Gunpowder first made by Schwartz	1320
48.	Handkerchiefs first made, at Paisley	1743
49.	Hydraulic press patented by Bramah	1 96
50.	Identity of lightning and electricity discovered	1752
51.	Jacquard loom for figured fabrics invented	1801
52.	Kaleidoscope invented by Brewster	1814
53.	Lace made in France and Flanders	1320
54.	Lacteal glands discovered by Asellius	1622
55.	Law pleading in England changed into English	1362
56.	Life boat first launched	1790
57.	Leaden pipes first used for conveying water	1236
58.	Lithography invented by Senefelder	1798
59.	Logarithms invented by Napier	1614
60.	London streets first lighted with oil lamps	1681
61.	Longitude determined by Sir John Harrison	1764
62.	Lotteries originated at Florence	1530
63.	Lucifer matches came into use	1834
64.	Maps and Charts first brought to England	1489
65.	Mariner's compass first known in Europe	1260
66.	Mercator's chart invented	1556
67.	Mesmerism propounded by Mesmer	1766
68.	Microscope invented by Jansen	1590
69.	Minie rifle invented	1833
70.	Mirrors of glass first made in England	1673
71.	Musical notes, as n w used, invented	1330
72.	Nautical Almanac first published	1767
73.	Newspapers first published in Europe, at Venice	1536
74.	New Style created by Pope Gregory XIII	1582
75.	Orrery, or Planetarium, invented by De Rheita	1650
76.	Oxygen gas discovered by Priestley	1774
77.	Padlocks invented at Nuremberg	1540
78.	Panorama, first exhibited by Barker	1788
79.	Pendulum Clocks invented	1649
80.	Phosphorus discovered by Brandt	1669
81.	Pins first made in England	1543
82.	Platinum first known in Europe	1741
83.	Playing cards invented	1390
84.	Post-houses first established in Europe, in France	1470
85.	Pumps in general use in England	1425
86.	Quicksilver first used in refining silver	1540
87.	Rhubarb first cultivated	1820
88.	Safety Lamp invented by Davy	1815

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89. Sandblast invented by Tilghman..... 1871
90. Savings Banks instituted in Switzerland..... 1787
91. Speaking Trumpet invented by Kircher..... 1652
92. Spectacles invented by Roger Bacon..... 1280
93. Spinning-jenny invented by Hargreaves..... 1767
94. Steam first used to propel boats by Fulton..... 1807
95. Tea brought to Europe by the Dutch..... 1610
96. Theory of the Rainbow developed by Kepler..... 1611
97. Thermometer invented by Sanctorio..... 1610
98. Tobacco introduced into Europe by Nicot..... 1560
99. Voltaic Battery constructed by Galvani..... 1800
100. Wire-drawing invented at Nuremberg 1410

FORMULAS FOR ABOVE SERIES OF DATES.

1. Wettish arch. 2. Wettish celery. 3. Tartan. 4. Darkies. 5. Thick boot. 6 Thick oven. 7. Water-rat. 8. Tall chateau. 9. Taxes. 10 Tattling. 11. Wettish worm. 12. Woodchucks. 13. Terrible. 14. Tiny pig. 15. Tidy mare. 16. Timorous. 17. Dogmas. 18. Dovelike. 19. Turkeys. 20. Dockyard. 21. Wettish judge. 22. Details. 23. Witnesses. 24. Tall middy. 25. Italians. 26. Thick jar. 27. Tough white-ash. 28. Wettish tube. 29 Tiny hammer. 30. Dunces. 31. Wettish dish. 32 Dwindle. 33 Dampish. 34. Toy-shops. 35. Thick beam 36. Trunnion. 37. Odious chief. 38. Driven. 39. Tall moor. 40. Tough time. 41. Wettish rag. 42. Devils. 43. Terraces. 44. Digits. 45 Definite. 46. Tiny lake. 47. Demons. 48. Decorum. 49. Thick peach. 50. Decline. 51. Devised. 52. Divider. 53. Dominoes. 54. Wettish onion. 55. Admission. 56. Thick bows. 57. Tiny midge. 58. Thick beef. 59. Dishwater. 60. Wettish feet. 61. Thick jar. 62. Dilemmas. 63. Defamer. 64. Hydrophobia. 65. Tenacious. 66. Tall ledge. 67. Thick judge. 68. Tulips. 69. Tough mummy. 70. Wettish cameo. 71. Dumb muse. 72. Thick jockey. 73. Dalmatia. 74. Dolphin. 75. Wettish eels. 76. Thick auger. 77. Dollars. 78. Thick fife. 79. Wettish rope. 80 Wettish ship. 81. Delirium. 82. Autocrat. 83. Dumps 84. Drugs. 85 Train-oil. 86. Dollars. 87. Deafness. 88. Devoutly. 89. Tough goat. 90. Thick fog. 91. Wettish lawn. 92. Tiny fees. 93. Thick check. 94. Devising. 95 Digits. 96. Wettish deed. 97. Digits. 98. Delicious. 99 Devices. 100. Threads.

CENTURY-ADJECTIVES USED IN ABOVE FORMULAS.

10. Odious.	12. Tiny.	15. Tall.	17. Thick.
11. Tidy.	13. Dumb.	16. Wettish.	18. Tough.

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One Hundred Events in the Pre-Christian Era,

With Dates According to Ussher's (Gouraud) Chronology.

1.	Cain murders his brother Abel	3876
2.	Pious Enoch translated to heaven	3017
3.	Noah begins the construction of the Ark	2468
4.	The Universal Deluge	2348
5.	Noah curses his grandson Canaan	2340
6.	Tower of Babel built	2247
7.	Covenant of God with Abraham	1921
8.	Abraham parts from Lot	1920
9.	Lot rescued by Abraham from the four kings	1912
10.	Melchizedec bestows his blessing upon Abraham	1912
11.	Birth of Ishmael	1910
12.	Destruction of Sodom and Gomorrah	1897
13.	Abraham, instigated by Sarah, expels Hagar	1891
14.	Isaac about to be sacrificed by his father	1871
15.	Birth of the twins Jacob and Esau	1836
16.	Esau sells his birthright for a mess of potage	1815
17.	Jacob deceitfully obtains the blessing of Isaac	1779
18.	Jacob flies to escape the wrath of Esau	1759
19.	Reconciliation of Jacob and Esau	1739
20.	Joseph sold by his brethren	1728
21.	Joseph libeled by Potiphar's wife	1718
22.	Joseph made prime minister of Egypt	1715
23.	Joseph's brethren go to Egypt to buy corn	1707
24.	Slaughter of the newborn male children of Israel	1572
25.	Moses born and miraculously preserved	1571
26.	Moses flies from Egypt	1531
27.	The Israelites cross the Red Sea	1491
28.	Institution of the Passover	1491
29.	Promulgation of the Law at Sinai	1491
30.	The Tabernacle set up; and the people numbered	1490
31.	Nadab and Abihu struck with sudden death	1490
32.	The blasphemer stoned by order of Moses	1489
33.	Moses draws water from the rock	1452
34.	Moses erects the brazen serpent	1452
35.	Balaam's ass speaks and reproves his master	1451
36.	Moses views Canaan, and dies on Mt. Nebo	1451
37.	The Israelites cross the Jordan under Joshua	1451
38.	Fall of Jericho under the trumpets of Joshua	1450
39.	Achan and his family stoned to death	1450
40.	Joshua stops the sun and moon on Mt. Gibeon	1450
41.	Israelites under Joshua finally conquer Canaan	1445
42.	**The Tabernacle set up at Shiloh**	**1444**

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43.	The death of Joshua	1443
44.	Extermination of the Benjamites	1416
45.	First Jubilee celebrated in Israel	1396
46.	Ruth follows Naomi to Bethlehem	1312
47.	Boaz marries Ruth	1312
48.	Deborah and Barak defeat the Canaanites	1285
49.	Gideon assured by the miracle of the fleece	1245
50.	Abimelech killed by an old woman with a tile	1233
51.	Jepthah sacrifices his daughter	1187
52.	Samuel offered to the Lord, by his mother	1168
53.	Birth of Samson	1155
54.	Samson's strategem of 300 foxes and firebrands	1136
55.	Samson carries off the gates of Gaza	1124
56.	Samson buries himself under the ruins	1117
57.	The ark of God taken away by the Philistines	1116
58.	The Philistines repent and surrender the Ark	1115
59.	Establishment of monarchy in Israel,	1095
60.	Jonathan and armor-bearer defeat Philistines	1087
61.	Samuel hewed Agag into pieces at Gilgal	1074
62.	David slays the giant Goliath	1067
63.	David feins madness to escape from King Achish	1061
64.	Saul commits suicide on Mt Gilboa	1055
65.	David dances before the Ark	1045
66.	Ambassadors of David insulted by Hanun	1037
67.	Absolom killed by Joab	1023
68.	Great pestilence sent at the option of David	1017
69.	Solomon's judgment as to the child	1013
70.	The Queen of Sheba visits Solomon	1002
71.	Death of Solomon	975
72.	Division of Israel and Judah, under Jeroboam	975
73.	Elijah fed by ravens in the wilderness	910
74.	Elijah slew the prophets of Baal	906
75.	Naaman's leprosy cured by Elisha	894
76.	Jezebel devoured by dogs	884
77.	Jehu destroys the temple and priests of Baal	884
78.	Jonah swallowed by a sea monster	807
79.	Hezekiah destroys the brazen serpent of Moses	726
80.	The kingdom of Israel destroyed by Salmanasar	721
81.	Holophernes beheaded by Judith	656
82.	Josiah the pious begins to reign	641
83.	A copy of the Law found by Hilkiah	624
84.	Nebuchadnezzar takes Jerusalem	606
85.	Susanna assaulted by the two elders	601
86.	Nebuchadnezzar's golden image set up	580
87.	The three Hebrews cast into the fiery furnace	580
88.	Nebuchadnezzar loses his reason	569

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89. Nebuchadnezzar recovers his reason..... 562
90. Daniel cast into the lion's den..... 537
91. Darius repudiates Vashti and marries Esther..... 518
92. Haman hanged on a gallows, fifty cubits high..... 510
93. Malachi, the last of the prophets, flourishes..... 420
94. Alexander the Great sacrifices in the Temple..... 332
95. Menelaus, by bribery, obtains the high-priesthood 172
96. Samaritan temple on Mt. Gerizim consecrated to Jupiter..... 170
97. The seven brothers tortured to death by Antiochus 167
98. Antiochus dies, smitten by the hand of God..... 164
99. Menelaus, the high-priest, put to death..... 162
100. Herod the Great appointed governor of Galilee.. 47

FORMULAS FOR FOREGOING DATES.

1. Moving age. 2. Misty sky. 3. Unweary chaff. 4. No morphia. 5. No mercy. 6. Unhewn rock. 7. Weighty bond. 8. Sad happiness. 9. Weighty baton. 10. Deep tone. 11. Sad pathos. 12. Defy sweeping. 13. Deaf *to* pity. 14. Wood faggot. 15. Stiff mush. 16. Tough dish. 17. Decoying boy. 18. Hot gallop. 19. Soothing mob. 20. Taken off. 21. Talkative. 22. Due acquittal. 23. Taxing. 24. Sad welkin. 25. Delicate. 26. Wide limit. 27. Dry path. 28. Tribute. 29. Attribute. 30. Tribes. 31. Stripes. 32. Hydrophobia. 33. Waterline. 34. Truly new. 35. Droll idea. 36. Sweet reality. 37. Drilled. 38. Trowels. 39. Trials. 40. Trials. 41. Thorough rule. 42. Outer error. 43. Other army. 44. Tartish. 45. Time badge. 46. Sweet maiden. 47. Automaton. 48. Downfall. 49. Downy roll. 50. Sudden simoom. 51. Added fog. 52. Duty sheaf. 53. Stout slowly. 54. Wide damage. 55. Detainer. 56. Doughty doing. 57. Hotheaded joy. 58. Too deadly. 59. Despoil 60. Deceiving. 61. Eightscore. 62. Dizzy shock. 63 Odious cheat. 64. Disloyal. 65. Odious reel. 66. Dismaying. 67. Odious name. 68. Deciding. 69. Odious dame. 70. Diocesan. 71. Pickle. 72. Buckle. 73. Pets. 74. Passage. 75. Fibre. 76. Favor. 77. Fever. 78. Physic. 79. Coinage. 80. Weakened. 81. Geology. 82. Charity. 83. Joiner. 84. Jews' joy. 85 Chaste. 86. Slaves 87. Lives. 88. Wooly sheep. 89. Elation. 90. Lame walk. 91. Old wife. 92. Ladies. 93. Ruins. 94. Mammon. 95. Deacon. 96. Doings. 97. Teaching. 98. Teacher. 99. Addition. 100. Rogue.

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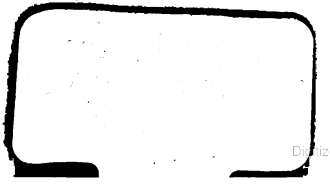
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